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DIESEL RAILWAY TRACTION

The March issue of this RAILWAY GAZETTE *publication, illustrating and describing developments in Diesel Railway Traction, is now ready, price 2s.*

General Election Stalemate

THE outcome of the recent General Election can hardly have given satisfaction to any of the parties. With one result still to be announced, the state of the parties is Labour 315, Conservative 278, Ulster Unionist 10, National Liberal 9, Liberal 9, Independents and others 3. The Labour Government has been returned to power with a majority of 7 and Mr. Attlee has announced some slight re-shuffling in Ministerial positions. Mr. Alfred Barnes, who remains Minister of Transport, and Mr. L. J. Callaghan, Parliamentary Secretary to that Ministry, both have been returned. Mr. Barnes, who took office on August 3, 1945, with the then title of Minister of War Transport, has established a record for the length of time he has he'd his position. He has beaten the previous record, held by Mr. Wilfred Ashley (later Lord Mount Temple) who was Minister of Transport from November 14, 1924, to June 7, 1929. During his long period of office Mr. Barnes has been a popular personal figure. He has shown a good deal of wisdom in the administration of his department, not least in his rejection of any temptation to interfere in the running of transport. His affability and approachability have done much to assist him and his department in such onerous tasks as the preparation and steering through Parliament of the Transport Act of 1947, which brought about the nationalisation of the major internal forms of transport of this country. With its present small majority, it seems unlikely that the Government will attempt to proceed with further nationalisation or other highly controversial projects, but will confine itself —at least for the time being—to such essential measures as the preparation of the Budget and the subsequent Finance Bill and to other matters on which there is at least some measure of agreement between the parties

Lord Glenavy Speaks Out

THE long delay which has occurred since it was first realised that the future of the Great Northern Railway Company (Ireland) must lie in some arrangement either with Coras Iompair Eireann (the Irish Transport Company) or jointly with that company and the Ulster Transport Authority, has had unfortunate repercussions on the G.N.R. It had been expected that by now a basis for agreement would have been reached with the southern and northern Irish corporations. That so many months have been permitted to go by without any tangible scheme being brought forward is regrettable, and at the annual meeting of the Great Northern Railway Company (Ireland) at Belfast on Tuesday last, the Chairman, Lord Glenavy, gave blunt expressions to his views on the subject. A report of his speech is given elsewhere in this issue. It is easy to understand the disappointment which has caused Lord Glenavy to make so forthright a statement; in the absence of pronouncements by spokesmen of the other two parties concerned, it is less easy to form a judgment. Coras Iompair Eireann and the Ulster Transport Authority have troubles of their own, but it seems inevitable that sooner or later their own interests will require that both must give practical effect to their economic interest in the future of the Great Northern Railway.

G.N.R. Record of Service and Efficiency

THE history of the Great Northern Railway of Ireland extends over 105 years. Its direction has been marked by efficiency and service to the public and its present direction, officers, and staff have ably maintained a long and praiseworthy tradition; even in the difficult circumstances of recent years it has demonstrated its ability to work profitably at least so far as its undertaking in the Republic of Ireland is concerned, as was shown in our issue of February 17. In the North it has had to meet a good deal of extraneous competition from road services, which has had a natural effect on its profit-earning. The company is alone among the principal providers of transport in Ireland in being dependent on its own resources to meet its commitments; its management and direction have had to grapple with very great and pressing problems, which might well have proved overwhelming to a less efficient undertaking, in order to maintain the services now being operated. It is hardly possible that the statement made by Lord Glenavy last Tuesday will not shortly be followed by some progress towards an agreement as to the future of the G.N.R.(I.)

Colonial Engineering Conference

AS the result of the success of a conference on Colonial engineering problems organised by the Institution of Civil Engineers in the summer of 1948 a further four-day conference will be held in London in July this year on somewhat similar lines. There will be three technical sessions, when papers covering a wide range of engineering subjects will be read, one of which, presented by Mr. J. R. Farquharson, Deputy General Manager and Chief Engineer of the East African Railways & Harbours, will deal with railway and dock problems in East Africa. Mr. R. D Gwyther will present a paper on Colonial harbours and wharves. Other papers will be devoted to research

and engineering problems in general, with special reference to tropical water supplies, survey and design of low cost roads, hydraulics, and so on. Delegates will have an opportunity of visiting the Port of London Authority works as well as the Harmondsworth road research laboratory and a concrete factory. Details of the arrangements are given elsewhere in this issue.

Travel Habits of the Londoner

IN a speech at a luncheon given by the Institute of Transport on February 28, Lord Latham, Chairman of the London Transport Executive, said that hitherto information on the social aspects of travel had not existed because it was impossible to ascertain it by ordinary methods. London Transport had therefore broken new ground in making a survey, claimed as the first of its kind undertaken on a similar scale by any transport organisation in the world.* It showed that London buses, trams, trolleybuses, Green Line coaches, tubes, and surface and suburban railways are used by just over half the London population for regular journeys, journeys made at least once a week for a specific purpose. Of the remainder, 37 per cent. mainly do their regular journeys by cycling or walking, and 10 per cent. make no regular journeys at all. This showed, Lord Latham stated, that though there had been a vast increase in travel on London Transport, there seemed wide scope for further expansion in travel by the public services. The proportion of work journeys drops from 70 per cent. on Mondays to Fridays to 48 per cent. on Saturdays, reflecting the widespread introduction of the five-day week since the end of the war. The average worker in Greater London who uses public transport to and from work spends 4s. 1d. on fares. The average amount spent per household on regular travel for work and otherwise is about 5s. a week.

Overseas Railway Traffics

DURING the first month of 1950, Canadian National Railways net revenue fell by £359,000, and brought a £855,000 deficit. There was a £397,000 decline in operating expenses as compared with the equivalent period of 1949, but this was more than offset by a £756,000 setback in operating revenues. Operating expenses for January were £12,535,000, and revenues amounted to £11,680,000. Antofagasta (Chili) & Bolivia traffics for the fortnight ended February 19 were higher by £800, though there was a slight decline in the first week. Receipts for the two weeks were £64,680 and £64,470, and on the aggregate have advanced by £15,400 to £483,404 for the current seven weeks. Traffics of the Paraguay Central continued to improve during the fortnight under review and at the close of the thirty-third week were G1,216,039 higher, at G4,686,705.

Joint Consultation in Engineering

JOINT Production Consultative & Advisory Committees were in operation at some of the principal British engineering works long before they were proposed by the Government during the war and in many cases the closest association with workers at all levels has been maintained for many years. Employees have been given the maximum information on matters which concerned them and their full assistance has been encouraged in various agreements between employers and the men. Recently a statement has been circulated to some engineering employers by the Engineering Advisory Council, which after suggesting that the experience and ideas of workers at all levels in factories should be used to make their full contribution to the common fund of information, goes on to suggest that it is desirable to ensure that workers at all levels understand the general plan of action of the factory and the way in which their own work fits into it. "The kind of information on which such an understanding will be based," it is suggested, "may cover such matters as the type and volume of production, markets, exports, delivery dates, sources of raw materials, and plans for reorganisation."

* "London Travel Survey, 1949." Published by the London Transport Executive, Westminster, S.W.1. Price 7s. 6d.

An Impractical Proposal

NO indication is given as to how a recommendation of this kind is to be implemented. Joint Production Consultative & Advisory Committees consist of representatives of each side of an organisation. The representatives on the works side are operatives elected from the various departments. On the managerial side, they are the Managing Director as Chairman and other officials. An operative may have valuable suggestions to make as to the general service of his department, and these might be used to increase his efficiency and that of the machines with which he is familiar. Would any useful purpose be served by instructing that operative on the general production plan, markets, exports, sources of supply of raw materials and any plans which the administration may have for reorganisation of the factory or the business? It seems most unlikely that, even if the time could be found, either during working hours—with subsequent loss of production—or during the worker's private hours—if he would be willing to forgo his leisure—that anything would be gained in attempting to give enlightenment on administrative, economic, and very probably political questions of this kind. Presumably, the workers' representative would be expected to convey his new knowledge to his companions. The planners would probably be surprised at the results.

The Development of the Eastern Punjab Railway

THE Eastern Punjab Railway was formed in August, 1947, out of the portion of the North Western Railway left in India after the partition of the sub-continent. From the start, the new system faced great difficulties; it had to move thousands of refugees when it was desperately short of locomotives and coaches, and when staff and materials were scarce. Widespread floods presented added problems. The subsequent recovery and progress of the railway are described in an article elsewhere in this issue by Mr. Daya Chand, Chief Administrative Officer of the railway. As the Moghalpura shops of the old North Western Railway passed to Pakistan, the Eastern Punjab is having to build its own shops, and a site has been selected about 130 miles from Delhi. Meanwhile, temporary open-air depots have done excellent work in repairing rolling stock. One of the most important works has been the remodelling of the New Delhi yard to cope with increased traffic resulting from the diversion to Bombay of traffic formerly passing to Karachi. The route mileage is 1,889, extending northwards from Delhi to the Pakistan border at three points.

Electric Rolling Stock for Portugal

THE first coach of an order for electric rolling stock placed by the Sociedade Estoril, Portugal, with the General Electric Co. Ltd. left Sheffield on February 24 for shipment from Manchester. The order includes a mixed-traffic locomotive, two first and second class motor coaches, and two second class and three third class trailers. The motor coaches seat 20 in the first class and 40 in the second, and the trailers seat 65 second class and 75 third class passengers. In addition, all coaches have ample tip-up seats. The electrical equipment is slung under the body, enabling the whole of the interior to be used for passenger accommodation, and only a small section at one side of each end vestibule is occupied by the driving compartment. The railway, of 5 ft. 6 in. gauge and electrified at 1,500 volts d.c., runs along the northern shore of the Tagus estuary, from the Cais do Sodre Station in Lisbon to Cascais, serving the holiday resort of Estoril. The mechanical parts and bodies of the rolling stock, which is all-steel, are being manufactured by Cravens Railway Carriage & Wagon Co. Ltd., of Sheffield. The General Electric Co. Ltd. obtained the order in face of intense competition from Continental manufacturers, and it is also

stated to be the first electric rolling stock order to be placed with a British manufacturer by a Portuguese railway.

Over-Running a Colour-Light Signal

FROM Colonel D. McMullen's report, summarised in this issue, on the collision just outside London Bridge on July 24, 1949, it will be seen that a light engine was driven past a colour-light signal at danger and met an electric train crossing its path at a diamond crossing. It is fortunate that the consequences were not much more serious. The driver declared that the signal showed yellow and persisted in that statement. Nothing was found wrong with the signalling equipment, outside or inside the signal box, and Colonel McMullen was forced to conclude that the driver had overlooked the signal and then imagined that the signal in rear, which had been undoubtedly at yellow, was the signal he had seen near the fouling point. He had been put out by what he thought was an uncivil message over the telephone from the signal box and it seemed likely that, in spite of denials, he might have been speaking about it to the fireman and have been distracted from keeping a careful lookout ahead.

London Area Passenger Charges Scheme

DURING the recent hearing by the permanent members of the Transport Tribunal sitting as the Charges Consultative Committee to advise the Minister of Transport as to the application by the British Transport Commission for an increase in freight rates, it was made known that a scheme of charges for the London Transport area and suburban lines was coming forward. This scheme,* covering all London Transport services, together with the suburban services of British Railways within the area served by London Transport buses, and embracing the whole of the London, Tilbury & Southend line, is the first of the charges schemes to be submitted to the Transport Tribunal in accordance with Section 76 of the Transport Act, 1947.

The proposed scheme relates only to passenger traffic, and only to the London area, partly because further investigation remains to be carried out before the B.T.C. can prepare appropriate schemes for other parts of the country, and also by reason of the urgent need for integrating more fully the transport system in the London area by removing as far as possible the anomalies in the present charges. Though the scheme will certainly be subjected to close scrutiny, the B.T.C. seeks authority to introduce it on October 1 next, when the conversion of the South London trams to buses is due to begin. The hearing is expected to commence in May.

The main objects of the scheme are to establish as far as possible equality of fares for journeys of similar length, and for those between common points by alternative routes; and, particularly, to remove the differences of charge which at present discourage people from using the most convenient means of transport for particular journeys. To secure a new common level, those charges which are relatively high will be reduced, and those which are relatively low will be increased. An important feature is the replacement of workmen's fares, which are at present limited to rail, tram, and trolleybus, by a system of cheap early morning fares available on all forms of transport, except Green Line coaches. This will mean a substantial new concession to early morning passengers over the entire bus system of London Transport for distances beyond one mile. These new early-morning fares will generally be higher than the present workmen's fares, though in most cases lower than the present ordinary fares, and in all cases lower than the proposed new ordinary fares. The estimated net effect of lowering and raising the fares would be to increase the gross receipts from passenger services in the London area in a full year from about £74½ million to about £77¾ million. This increase of approximately £3,000,000 represents a substantial average increase in fares which is very noticeable in the proposed new scales for London Transport ordinary single fares and in the early morning return fares which replace workmen's fares.

The scheme is designed to secure a large measure of assimilation of Railway Executive and London Transport Executive charges by applying to both, as far as practicable, a new standard scale based generally on a rate of 1·25d. a mile. This involves some increase of ordinary single fares on London Transport services, other than coaches, but the new scale leaves the existing 1½d. minimum fare and 4d. and 5d. fares unchanged. It involves on the other hand reductions of coach ordinary fares, with a new minimum of 8d. instead of 9d., and of the cost of travel to large numbers of London area passengers on Railway Executive services.

In the case of the Railway Executive services, with the principal exception of the London, Tilbury & Southend line, the 1·25d. a mile scale is applied in the form of a general system of day return fares available all day, but the existing ordinary and monthly return fares would be retained in operation, since their withdrawal or alteration would affect the structure of charges for journeys beyond the London area which are outside the scope of the present scheme. It is considered that the new 1·25d. a mile day return fares will suit the requirements of a substantial proportion of Railway Executive passengers for local London area journeys. The introduction of these fares will largely render redundant the existing cheap-day return fares, which are subject to time restrictions and limited to selected pairs of stations, and they will be withdrawn. In the case of the London, Tilbury & Southend line, the need for retaining the existing ordinary and monthly return fares, so as not to affect the charges of the Railway Executive beyond the area, does not arise, and, accordingly, the 1·25d. a mile scale is applied on this line as the new basis of the ordinary fares, as on London Transport railways, and the existing ordinary and monthly return fares will be withdrawn, although often lower than the proposed fares.

The standard pre-war scales for rail season tickets in use by the Railway Executive and the London Transport Executive were nearly alike and identical charges generally had been adopted between important pairs of common points. At present, the rates in operation on the Railway Executive lines are 55 per cent. above pre-war, while those on London Transport railways are 25 per cent. above pre-war. A common standard scale for season ticket rates on London Transport railways and British Railways is now proposed. The new standard is 9 to 14 per cent. below the present standard of British Railways for the material distances and 5 to 12 per cent. above the present standard of London Transport. Most British Railways' season ticket rates therefore, will be reduced, but some are considered to be so much below standard that, despite the adoption of a lower standard scale, they will be increased.

For the first time, therefore, an early morning fare concession may apply on all London buses. Workmen's return fares now vary and are of limited application. A new system of early morning fares will replace them, and on all forms of transport, except coaches, will be available to all passengers travelling over a mile and completing journeys before 8 a.m., or starting before 7.30 a.m. on London Transport railways. The level of charge proposed for the new early morning fares is higher than present workmen's fares, except for the first 8 miles on British Railways. The new early-morning fares will be lower than the new 1½d. a mile scale for London Transport ordinary fares and British Railways day return fares, and the reductions on these will range from 1d. a day for 2-mile journeys to 10d. a day for 10-mile journeys. The present shift workers' facility will cease, as the B.T.C. considers that there is no justification for the differential treatment of different sections of the community travelling at the same time.

On the railways, the early morning fare will be by way of a return fare as at present; on the road services, there will be a low early-morning single fare for the outward

* "Draft London Area (Interim) Passenger Charges Scheme." British Transport Commission, 55, Broadway, London, S.W.1. Price 5s.

journey, and passengers will pay the ordinary single fare for the journey back. The cost of the double journey will be the same by rail or road up to distances of 10 miles.

Commercial Train Services—London and Leicester, Nottingham, and Sheffield

THE Great Central Railway from 1899 was in the happy position of having Leicester, Nottingham, and Sheffield on the direct route of all its main-line expresses (an advantage which neither of its rivals possessed), and it is therefore necessary to group together the services between London and these three centres. But although the commercial services of 1939 and 1949 were practically confined to two routes, from Marylebone and St. Pancras, there was a period before and after 1899 when a considerable share of this business passed *via* Kings Cross.

In the autumn of 1898, for example, the Great Northern gave fast services from Kings Cross to Nottingham at 7.15 a.m. and 10 a.m. and to Sheffield at 7.15 a.m. and 10.15, against a Midland 9 a.m. from St. Pancras to Nottingham and Sheffield, with connection to Leicester, and a 10.5 a.m. to Leicester; and there were good up services to Kings Cross from Nottingham at 5 p.m. and 6.20 and from Sheffield at 3.6 p.m. and 6.8, with St. Pancras trains from Sheffield at 4.20 p.m. and 5.12 (5.22 and 6.20 from Nottingham) and from Leicester at 3.47, 5.26, and 6.20. Even then the facilities for a return journey to London in one day were rather better than those in the opposite direction. Business men could leave Sheffield for St. Pancras at 7.25 a.m. and 9.18 and return at 5.40 p.m., leave Nottingham at 6.45 a.m. or 8.33 and return at 5.40 p.m. or 6.45, and leave Leicester at 7.30 a.m. and 9.33 with return trains at 4.5 p.m. and 6.45. To Kings Cross there were departures at 7.58 a.m. and 9.33 from Sheffield and 7.55 a.m. and 8.35 from Nottingham, with returns to both places at 4.15 p.m. and 5.30.

The original Great Central services before 1904 were not particularly fast, though there was a very useful train from Marylebone at 8 a.m., reaching Leicester at 10.24, Nottingham at 11, and Sheffield at 11.54, and the Great Northern could keep up a very effective competing service till the autumn of 1907, when an agreement ended the rivalry. Most of the Sheffield services from Kings Cross then ran *via* Nottingham and over the new Great Central line, instead of *via* Retford; and in the winter of 1904-5 departures from Marylebone had been settled at 8.45 a.m. and 10 a.m., 3.25 p.m., 4.35, 5.25 and 6.20, with morning arrivals at 10.20 and 11.50 (this latter a 3-hr. non-stop from Sheffield), and evening trains from the provinces due in London at 6.42 p.m., 8.40 and 9.50; Sheffield boasted a midday 2-hr. 57-min. train to Marylebone, with two stops. The Great Northern took passengers down from Kings Cross at 7.15 a.m. and 10.20 and brought them back, less satisfactorily, at 8.5 p.m. and 10.5 into Kings Cross, but there were still morning up services to Kings Cross in 2 hr. 50 min. from Nottingham, and 3 hr. 12 min. from Sheffield *via* Retford, with good return trains at 4.15 p.m. and 5.30.

Revision of the Midland Anglo-Scottish services in 1901 had tended to improve Leicester's communication with London at the expense of Nottingham and Sheffield. The most noticeable features of the 1904-5 timetables were an 8.30 a.m. departure from St. Pancras (11.3 at Nottingham, 11.2 at Leicester, and 12.14 p.m. at Sheffield), the 132-min. up services from Nottingham to London at 8.28 a.m. and 8.8 p.m., and the 105- and 106-min. timings between St. Pancras and Leicester.

These services were not much changed before the 1914 war, though competition with the Great Central caused many small alterations; but in the summer of 1905, when the 3.25 p.m. from Marylebone was booked non-stop to Sheffield in 2 hr. 50 min., slipping a carriage at Leicester, Kings Cross replied with a 6.10 p.m., also non-stop to Sheffield *via* Retford in 2 hr. 50 min., and offered up trains from Sheffield at 10.12 a.m. and 4.40 p.m., arriving at Kings Cross at 1.25 p.m. and 7.37.

During the 1914-18 war, the wholesale worsening of train services in January, 1917, left the Great Central in the fortunate position of being able to serve Leicester, Nottingham, and Sheffield from London considerably faster than the Midland could, without infringing the minimum journey-time of 4½ hr. between London and Manchester. Restaurant cars were retained by both routes, and in October, 1917, when services were at their lowest ebb, the Great Central 7.35 a.m. up from Nottingham (8.13 from Leicester) was due Marylebone at 10.34, as against a Midland 7.5 a.m. from Sheffield and 8.24 from Nottingham, which was combined at Kettering with the 8.57 from Leicester and reached St. Pancras at 11.18. The 3.15 p.m. and 6.10 from Marylebone reached Sheffield in 3 hr. 19 min. and 3 hr. 34 min., against times of 4 hr. 10 min. and 3 hr. 52 min. by the 4.25 p.m. and 5.45 from St. Pancras; this last took 2 hr. 11 min. to Leicester, against 1 hr. 54 min. by the 3.15 from Marylebone. The 8.45 a.m. Great Central train from London was in Leicester at 11.2, Nottingham at 11.37, and Sheffield at 12.31, and was practically the only morning service from London to the Midlands, and the 3.26 p.m. and 4.55 departures from Sheffield were due at Marylebone at 6.51 and 8.55, against a Midland service at 3.17, reaching St. Pancras at 7.45.

Restoration of services between 1919 and grouping in 1923 was very gradual, but after 1923 there were some important changes. From June, 1924, an all-Pullman train began to run from Kings Cross at 11.5 a.m., due at Nottingham at 1.28 p.m. and Sheffield at 2.20, returning from Sheffield at 4.45 p.m. and Nottingham at 5.38, due at Kings Cross at 8.0. The supplements charged between London and Sheffield were 6s. and 3s. 6d. first and third class respectively. Patronage at this hour was poor, the 11.5 a.m. departure from London being much too late, and the train was altered from July 14, 1924, to work up from Sheffield at 10.30 a.m. and return from Kings Cross at 6.5 p.m., still serving Nottingham.

From April, 1925, until its withdrawal on September 21 of that year, the all-Pullman train left Sheffield at 11.3 a.m. *via* Retford, due Kings Cross at 2 p.m. and, still returning at 6.5 p.m., was in Sheffield at 9.2 (7 min. slower than the 6.10 p.m. non-stop of 20 years earlier), and this was virtually the last case of special mileage over the old Great Northern main line to serve Sheffield. In May, 1932, however, when the 7.50 a.m. from Leeds was accelerated to reach Kings Cross at 11.20, a connection with a through carriage was given at 8.20 a.m. from Sheffield to join the Leeds train at Retford, and this 3-hr. up service from Sheffield was the fastest by any route.

By the old Midland line, the "Yorkshireman" began to run in March, 1925, from Sheffield at 10.15 a.m. and Leicester at 11.38, reaching St. Pancras at 1.25 p.m., and returned at 4.55 p.m., due at Leicester at 6.42 and Sheffield at 8.5. The Great Central at this date ran a 5 p.m. from Marylebone, taking 1 hr. 53 min. to Leicester and 2 hr. 27 min. to Nottingham, and its up morning service left Nottingham at 8.43 and Leicester at 9.18, due Marylebone at 11.10. Its 9.35 a.m. from Sheffield, 10.28 from Nottingham and 10.54 from Leicester, due Marylebone at 1.13 p.m., covered the Midland "Yorkshireman," and although the "Yorkshireman" ran ostensibly for the benefit of Bradford and London traffic *via* Thornhill, very little attempt was made, even after 1923, to space out the services by the St. Pancras and Marylebone routes.

In July, 1929, the Great Central was offering a 7.30 a.m. up from Sheffield, 8.21 from Nottingham and 8.51 from Leicester, due Marylebone at 10.40; and down trains at 4.55 p.m. and 6.20 from Marylebone, serving Leicester and Nottingham, took 3 hr. 7 min. and 3 hr. 13 min. to Sheffield. By the Midland, a service from Sheffield at 7.10 a.m. and Nottingham at 8.25 reached St. Pancras at 10.40, and departures from Leicester at 7.51 a.m. and 8.51 (the former coming through from Nottingham at 7 a.m.) were in London at 9.56 and 11.2. The 4.55 p.m. "Yorkshireman" and the 5 p.m. from St. Pancras to Nottingham covered the Great Central 4.55 p.m., whilst 6.15 p.m. and 6.25 departures from St. Pancras corresponded to the Great Central 6.20 p.m.

Throughout this period, there was hardly any improvement in the morning trains from London. The first accelerations of the Anglo-Scottish day services in 1932 caused the Midland 9 a.m. from St. Pancras to reach Nottingham at 11.9, and from September, 1937, its departure became 9.5 and the Nottingham arrival 11.8, for, from this date, the general revision of Midland Division services set a 60-m.p.h. standard between St. Pancras and Leicester and Nottingham. For a short time the "Yorkshireman," leaving St. Pancras at 5.10 p.m., ran non-stop between London and Sheffield in 2 hr. 52 min., and the 1939 timetable is virtually that of September, 1937.

Some deterioration, however, had set in by the autumn of 1938, when the down "Yorkshireman" reverted to its old 4.55 p.m. departure from St. Pancras and took 3 hr. 5 min. to Sheffield, and the up non-stop from Sheffield made a call at Leicester, and took 2 hr. 56 min. to London. A pair of 123-min. non-stop trains between Nottingham and St. Pancras (9.47 a.m. up and 4.20 p.m. down) was withdrawn; these were almost the only trains of the accelerated 1937 services which were not paralleled by expresses on the old Great Central route. During the summer of 1939 the cancellation of a 6.20 p.m. from Manchester to St. Pancras altered the evening up service from Leicester from 8.20 p.m. to 8.5, the London arrival being 9.50. No fault, however, could reasonably be found with the Midland Division 1939 timetable, though the earliest arrival in Nottingham from London, at 11.8 a.m., was too late, and the 7.0 a.m. from Nottingham (due in St. Pancras at 9.55) was a poor substitute for the pre-1914 6.35 a.m. from Nottingham, 7.18 from Leicester, a very popular business train, which reached London at 9.20.

Apart from the over-late provincial arrivals of the 8.45 a.m. from Marylebone, which would probably have been a much better loaded train had it run earlier and faster, the Great Central route 1939 timetable was satisfactory, though examination of both timetables shows little co-operation between the L.N.E.R. and the L.M.S.R. The gap between the up arrivals at Marylebone, from 2.55 p.m. to 6.38, was very long, while two trains up from Nottingham at 6.9 p.m. and 7.13 gave a very liberal evening service

At this time, the services from and to Kings Cross scarcely need consideration. The 8.20 a.m., a 3-hr. train from Sheffield, dating from 1932, still ran; but the only down service was the 4.45 p.m. Pullman *via* Doncaster, due Sheffield at 8.24. Nottingham had up trains at 7.49 a.m. and 8.30, due Kings Cross at 10.28 and 11.20, but only one down 3-hr. service, at 5.50 p.m. Although the 7.25 a.m. down from Kings Cross reached Sheffield at 10.46, *via* Retford, and was the earliest down commercial service, the only up evening connection from Sheffield to Kings Cross was at 5.15 p.m., and took 4 hr. 10 min. *via* Doncaster, while Nottingham passengers (who took the 7.25 a.m. down, arriving at 10.31 with a change at Grantham) had no return evening service by this route.

Apart from deceleration, the London Midland Region 1949 timetable is quite a satisfactory substitute for the 1939 services, though the gap from 8.50 a.m. till 2 p.m., with no through express to Nottingham, is long, and the loss of the 5.35 p.m. up from Sheffield makes the evening return service from Sheffield and Nottingham rather poor. The withdrawal of the 12.30 p.m. from St. Pancras and 2.30 p.m. up from Leicester is not a serious commercial loss, especially since the Eastern Region 2.21 p.m. up from Leicester compensates for the very slow running of the L.M.R. 2.42 p.m., which is still booked to wait at Bedford for a now vanished midday express from Leeds to pass, and is virtually a local train from Bedford to St. Pancras.

The Eastern Region 1949 timetable still caters adequately for business men coming up to London for the day. But the loss of the 8.45 a.m. down, and the extremely poor speed of the 5.3 p.m. up from Sheffield, have much decelerated services between London and the provinces. The spacing of the up trains is bad, with a 4-hr. 20-min. gap from Sheffield (over 5 hr. into London) with no express service whatever after the 4.28 p.m. arrival at Marylebone. A train is needed in this interval to put the return service from the provinces to London on its old footing. To balance, a down train is needed to replace the 8.45 a.m. It should be earlier, and with fewer stops than its prototype, yet still making one pick-up stop in the outer suburban area. Whether it should run north of Nottingham would depend on anything that might be done to improve the morning service to Sheffield and beyond from Kings Cross.

LONDON TO LEICESTER, NOTTINGHAM, AND SHEFFIELD

1939

		a.m.	a.m.	a.m.	a.m.	a.m.	noon	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.
St. Pancras	dep.	8.25	9. 5	10. 0	10.30	10.55	12. 0	12.30	1. 0	2.10	2.30	3.25	4.30	4.55	5. 0	6.20	6.30	7.50
Leicester London Road ...	arr.	10.24	—	11.44	12. 9	—	1.44	2. 9	3.24	—	4. 9	5.49	6.15	6.41	—	—	8.19	9.29
Nottingham L.M.S. ...	arr.	—	11. 8	12.40	—	1.44	2.40	—	3.45	4.13	—	5.38	7.17	—	7.21	8.23	—	10.22
Sheffield L.M.S.	arr.	—	12.12	1.23	—	2.51	3. 2	—	4.47	5.17	—	6.45	—	8. 0	8.26	9.28	—	10.55
			a.m.	a.m.			p.m.					p.m.			p.m.	p.m.		
Marylebone	dep.	—	8.45	10. 0	—	—	12.15	—	—	—	—	3.20	—	—	4.55	6.20	—	—
Leicester Central	arr.	—	11. 0	12. 2	—	—	2.24	—	—	—	—	5. 9	—	—	6.43	8.19	—	—
Nottingham Victoria	arr.	—	11.32	12.30	—	—	2.58	—	—	—	—	5.36	—	—	7.11	8.48	—	—
Sheffield Victoria	arr.	—	12.23	1.21	—	—	3.50	—	—	—	—	6.26	—	—	8. 1	9.38	—	—

1949

		a.m.	a.m.	a.m.	a.m.		a.m.		p.m.	p.m.	p.m.	p.m.	p.m.		p.m.	p.m.	p.m.	
St. Pancras	dep.	8.15	8.50	9.40	10.15	—	11.45	—	12.55	2. 0	2.15	3.12	4.15	—	4.50	6.40	6.30	—
Leicester London Road ...	arr.	10.32	—	11.42	12.13	—	1.48	—	3.41	—	4.13	—	6.19	—	7.27	—	8.32	—
Nottingham L.M.R. ...	arr.	—	11.27	—	1.33	—	2.48	—	4. 1	4.30	—	5.45	—	—	7.29	9. 9	—	—
Sheffield L.M.R.	arr.	—	12.42	1.18	2.46	—	3.27	—	—	5.45	—	7. 0	—	—	8.45	10.30	—	—
				a.m.			p.m.					p.m.			p.m.	p.m.		
Marylebone	dep.	—	—	10. 0	—	—	12.15	—	—	—	—	3.20	—	—	4.50	6.15	—	—
Leicester Central	arr.	—	—	12.25	—	—	2.38	—	—	—	—	5.51	—	—	7. 0	8.31	—	—
Nottingham Victoria	arr.	—	—	1. 4	—	—	3.17	—	—	—	—	6.30	—	—	7.33	9. 4	—	—
Sheffield Victoria	arr.	—	—	2.11	—	—	4.19	—	—	—	—	7.32	—	—	8.35	10.11	—	—

SHEFFIELD, NOTTINGHAM, AND LEICESTER, TO LONDON

1939

		a.m.	a.m.	a.m.	a.m.	a.m.	a.m.	a.m.	a.m.	a.m.	p.m.	a.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.
Sheffield L.M.S. ...	dep.	—	—	7.15	—	9. 0	9. 5	9.26	10.13	10.40	—	11. 0	12.18	—	1.47	1.55	—	3.22	4. 6	—	5.35	—	6.21
Nottingham L.M.S....	dep.	7. 0	—	8.23	—	9.24	10.14	—	11.18	—	—	—	1.25	—	—	2.59	—	3.42	5.11	—	6.40	—	—
Leicester London Rd.	dep.	7.50	8.52	—	9.37	10.21	—	11.21	—	11.57	12. 9	12.18	1. 5	2.30	3. 8	—	4.11	4.46	5. 5	6.29	—	7.22	8.20
St. Pancras	arr.	9.55	10.50	10.35	11.20	12. 0	12.54	1. 0	1.21	1.36	1.48	2. 7	3.32	4.10	4.47	5.35	5.50	6.25	7.20	8.12	8.55	9.10	9.59
				a.m.				a.m.				a.m.						p.m.			p.m.		p.m.
Sheffield Victoria ...	dep.	—	—	7.30	—	—	—	9.35	—	—	—	11.21	—	—	—	—	—	3.30	—	—	5. 2	—	6.21
Nottingham Victoria	dep.	—	—	8.21	—	—	—	10.27	—	—	—	12.13	—	—	—	—	—	4.21	—	—	6. 9	—	7.13
Leicester Central ...	dep.	—	—	8.51	—	—	—	10.57	—	—	—	12.47	—	—	—	—	—	4.49	—	—	6.44	—	7.43
Marylebone	arr.	—	—	10.40	—	—	—	1.10	—	—	—	2.55	—	—	—	—	—	6.38	—	—	9. 0	—	9.52

1949

		a.m.	a.m.	a.m.	a.m.	a.m.	a.m.	a.m.		a.m.			a.m.	p.m.		p.m.	p.m.	p.m.	p.m.		p.m.		p.m.
Sheffield L.M.R. ...	dep.	—	—	7.10	—	8.51	9. 0	9.24	—	10.47	—	—	11.59	—	—	1.43	—	3.41	4. 3	—	4.51	—	6.30
Nottingham L.M.R....	dep.	6.42	—	8.31	—	9.25	10.17	11.19	—	—	—	—	1.16	—	—	3. 0	—	4.12	5. 8	—	6. 8	—	6.58
Leicester London Rd.	dep.	7.37	8.47	—	9.40	10.28	—	—	—	12.24	—	—	1. 0	2.42	—	—	4.13	5.20	6.30	—	—	—	8.24
St. Pancras	arr.	10. 0	11.15	11.25	11.50	12.40	1.25	2.10	—	2.30	—	—	4. 0	5.33	—	6. 5	6.20	7.30	8.45	—	9.20	—	10.55
				a.m.				a.m.					a.m.			p.m.					p.m.		
Sheffield Victoria ...	dep.	—	—	7.40	—	—	—	9.38	—	—	—	—	11.27	—	—	12.43	—	—	—	—	5. 3	—	—
Nottingham Victoria	dep.	—	—	8.43	—	—	—	10.49	—	—	—	—	12.30	—	—	1.46	—	—	—	—	6.21	—	—
Leicester Central ...	dep.	—	—	9.17	—	—	—	11.30	—	—	—	—	1.11	—	—	2.21	—	—	—	—	7. 2	—	—
Marylebone	arr.	—	—	11.25	—	—	—	1.58	—	—	—	—	3.29	—	—	4.28	—	—	—	—	9.34	—	—

LETTERS TO THE EDITOR

(The Editor is not responsible for the opinions of correspondents)

Regional Redistribution

February 27

SIR,—May I assure your correspondent, Mr. J. B. Latham, that the forthcoming revision of the Regional boundaries of British Railways should not involve the difficulty which he fears in regard to the public timetables? Train services over penetrating lines will be shown in the timetables of the Region operating them; they will also be shown in more than one Region's timetables where necessary for the convenience of the public, in accordance with present practice. Thus, the train services between Marylebone and Sheffield, which Mr. Latham mentions in his letter in your issue of February 24, will continue to be shown in the Eastern Region timetables.

Yours faithfully,

D. S. M. BARRIE
Public Relations Officer

The Railway Executive, 222, Marylebone Road, N.W.1.

February 19

SIR,—I was very interested in the treatment in *The Railway Gazette* of February 17, of the new Regional boundaries plan, but I am afraid the duplication of work on the staff and operating sides will be apt to outweigh the "commercial" advantages. It is a very confusing scheme, at first sight, in the Midlands, for we are told first that all former L.M.S.R. lines north of Hasland and Dore are to be Eastern, and then that all north of Penistone and Darfield are North Eastern! In spite of the great difficulties in transferring "operating," it is hard to see how the full benefit of the adjustments can be acquired until some such transfer is made, and if (as you hint) the train services on the transferred sections are to be included in the timetables of their new Regions (which really seems unnecessary) it will be a very confusing arrangement. The West Riding is going to be very puzzling indeed.

Yours faithfully,

R. E. CHARLEWOOD

23, Somertrees Avenue, London, S.E.12.

London Transport Services

February 23

SIR,—I was interested to read in your issue of February 3 Mr. Skelton's letter on "travel in England."

The termination of a Wimbledon train at Parsons Green, to which he refers, is an incident which occurs only rarely and results from a decision on the part of the Controller to reverse a train from west to east to maintain the eastbound service in certain emergencies. The time factor involved does not allow of an announcement being made to passengers at Earls Court.

With regard to the uncoupling of cars at Parsons Green between 7 and 8 p.m., only four trains are affected, two Wimbledon and two Putney Bridge. This uncoupling is necessary for operating purposes and the only inconvenience to passengers is that those in the two cars affected are requested to transfer to the forward part of the train.

Since he gives no specific details, it is not possible to investigate Mr. Skelton's complaint regarding absence of information to the public when services were abnormal on the Northern Line. London Transport devotes constant attention to the passing of information regarding such incidents to its staff by means of a broadcast system direct from the Controller to station booking office staff, so that the public may be informed with the minimum delay. I regret that Mr. Skelton should have found information lacking on one particular occasion, but I assure him that intensive effort is made by London Transport to reduce such occurrences to the minimum.

When a passenger travels by road services in a *bona fide* case of a railway breakdown and receives a request for payment of fare, due to no official notification of the incident having reached the road operating staff, it is quite sufficient for the passenger to give his name and address to the conductor.

London Transport makes every effort to avoid delays such as those to which Mr. Skelton refers, as is exemplified by the 1949 reliability record, which shows that each of our trains ran an average distance of 2,300 miles before causing a delay of even as little as two minutes in service.

Yours faithfully,

GEORGE DODSON-WELLS,
Chief Public Relations Officer

London Transport Executive, 55, Broadway, S.W.1.

Wagon Turn-Round

February 20

SIR,—Your comment in the issue of November 4, 1949, stressed the need for a quick turn-round of wagons, coal wagons in particular, to minimise the then possible shortage during the winter. I suggest that Mr. Roberts, in his missionary zeal for the high-capacity wagon and a revolutionised system of handling, rather avoids the issue.

Surely any railway organisation will maintain only the number of wagons, of whatever capacity, needed to convey its normal traffic, *plus* a normal allowance for wagons under repair. When exceptional conditions, as for example, the deferred maintenance in the war years and the recurrent economic troubles since, upset the balance and the proportion of the total wagon stock requiring repair rises inordinately, a wagon shortage will result. Even supposing that Mr. Roberts's principles had been in full operation in 1939, I submit that 1949 would have brought precisely the same difficulties for precisely the same reasons.

I entirely agree with Mr. Roberts that from a purely traffic point of view the high-capacity wagon is ideal, but I think he greatly over-simplifies the problem of conversion, especially when one considers the intricate pattern of trader-railway relations involved. Commercial considerations, however much an operating man may curse them, are after all the bread-and-butter of the business.

Mr. Sheward has spoken for one part of the coal trade; it would be interesting to hear the considered views of large-scale industry on Mr. Roberts's proposals. Mr. Roberts also suggests that a concrete instance would provide useful data for a true assessment of the value of his theories. What came of the experiment carried out on the N.E.R. earlier this century when a number of high-capacity wagons was constructed to work from, I believe, the Ashington group of collieries? Can some N.E.R. man enlighten us both?

Yours faithfully,

TRAFFIC APPRENTICE

164, Turney Road, London, S.E.21

An Unjustifiable Timetable Practice

February 24

SIR,—In your issue of February 3, on page 122, comment is made on recent train service alterations in the Scottish Region which you consider have been made too late for inclusion in the current issue of *Bradshaw*.

The alteration of the 7.10 p.m. train from Carlisle to Edinburgh Waverley to leave Carlisle at 7.33 p.m., specially advised to the timetable publishers on December 16, was also included in a supplementary publishers' notice issued on December 17, and other alterations included in the same supplementary notice were incorporated in the January timetable issue. It has been our experience that adjustments in train services advised even up to the 20th of the preceding month have been included in the timetables pertaining to the next month, and there was no reason to doubt that this particular item would be included in the January issue.

With regard to the protest on what is termed "An Unjustifiable Time-Table Practice," the undesirability of altering trains to run earlier during the currency of a seasonal timetable is fully appreciated, but unfortunately, this cannot always be avoided. When, as in the case of the current winter timetable, the period covered is one of eight months, it is not practicable to defer the introduction of service improvements for such a lengthy period, when, in the interval, circumstances dictate the necessity for change.

There has been a number of instances of earlier timing possibilities occurring in this Region during the present Winter, due to exceptional circumstances, such as the elimination of unnecessary calls, and the modification of speed restrictions over the part of the East Coast line where bridge structures had been demolished during the floods of 1948.

In no case, however, has an alteration been carried into effect without timely intimation of intention being given the timetable publishers for inclusion in their appropriate issues.

Yours faithfully,

H. M. HUNTER
Public Relations & Publicity Officer

British Railways, Scottish Region, Glasgow, C.1.

1948 Locomotive Exchanges

January 31

SIR,—I have been greatly interested in this correspondence, and feel that some points from personal observation of the work of the Bulleid 4-6-2s may be welcome. I have had the opportunity of watching closely the work of the "Schools," "King Arthurs" and "Lord Nelsons." I saw them all from their beginnings, and can testify that excellent work was performed by each, but in my view the light and heavy 4-6-2s are outstanding in every way. I was not surprised when a Nine Elms driver, now retired, told me that he could not understand a driver being satisfied with anything else!

Now, as to hill climbing, both these types are superior to the other three on one bank up which I travel and clock them several times a week. After a stop at Christchurch, it is seldom with twelve coaches that any of the three would attain 52-53 m.p.h. by Hinton Admiral, and they then drop at least 8 m.p.h. by the top of the bank just after passing mile post 100. The 4-6-2s generally drop 2-3 m.p.h. and I have known a "Merchant Navy" conclude this bank without dropping speed at all!

On the Exeter road their work is even finer, and I can testify to the command that these locomotives have of their job. I can remember a Plymouth guard telling me that on one of his first trips up Honiton he had to look out of the van window to be sure that he really was going up the bank he knew so well. Mr. Maxwell is indeed mistaken if he thinks these locomotives cannot climb. I would invite him to come and see. They will roar up the banks effortlessly and laugh at him!

The British seem to be fond of hanging on to one thing and thinking there is no better. Mr. Bulleid was well described to me by Driver Whittle, of Bournemouth, as "a man of great courage to put so many new things into one machine." I well remember reading the details—a large boiler, large superheater, adequate grate area, thermic syphons, outside admission valves, a neat valve gear, high steam pressure, and much more besides, and electric light from a turbo-generator.

Mr. Bulleid has given the Southern a fine stud of locomotives, and my one fear is that someone on the other Regions will take a fancy to them, and that they may be drafted elsewhere. Wherever they may go, they will, if allowed to "have a go," show themselves to be what they are—a most outstanding piece of modern railway engineering design.

Their coal consumption is alleged to be high. About two years ago I asked a Nine Elms driver about short cut-off working and his views on it! He said he well knew that a modern express engine normally embodied this design to work with a full regulator opening; but he found that he could "do just the same speed" and all the load and schedule required with "25 per cent. and 80 lb. in the steam chest"!

We all know what happened when the cut-off of the L.N.E.R. Pacifics was altered. Mr. Nock gives that clearly in his book on Sir Nigel Gresley's locomotives. Are the Southern Pacifics being run roughly on the old lines of driving and is this keeping the coal consumption up?

I should be glad to know when a "Standard" passenger type is finally produced that many of Mr. Bulleid's ideas would be incorporated.

Yours faithfully,

D. D. MALPAS

10, Crabton Close Road, Bournemouth

Fostering the Travel Habit

February 20

SIR,—From 1939 onwards the country has suffered from incessant discouragement of the travel habit. First we had the slogan posted up in the booking offices "Is your journey really necessary? and now we have fare rates that the public largely and obviously refuses to pay.

Many of the millions fooled away every year in harmful recreations could be turned into the coffers of British Railways. Big posters of industrial processes or the spring-cleaning of railway works will not help very much. The whole publicity system needs overhauling. Every schoolboy wants to travel; why not encourage him in a habit that will assist his health and education? School travel clubs and journeys would start a line of expenditure before smoking got a hold on many of the youngsters. Hundreds of thousands of people in the South Country have never seen a mountain or enjoyed climbing in North Wales or the Lake District. The "Runabout" local season tickets are good, but the starting point is so far away from the big population centres.

The travel instinct is inherent in this country and it only needs encouragement to make it operative as it was before the war.

Yours faithfully,

A. HOWARD EVANS

5, Hillside Crescent, Leigh-on-Sea

Suburban Coach Design

SIR,—Various letters, particularly by Mr. Clarke and Mr. Pascall in your issues of October 14 and December 2, respectively, have raised the issue of compartment *versus* open stock, carrying *versus* seating capacity. They prompt me to raise a startling and frightening possibility. Seating capacity in a nine-car Eastern Region electric train is about half that of a ten-coach L.N.E.R. steam train. There are far more standing passengers on the Central Line to Woodford than there is in the steam trains. The tendency for New York Subway trains is for them to be provided with a minimum of seats and a greater standing capacity.

This capacity angle may well suit the operating departments, but the trend may go further, and result in halving the rolling stock mileage by cutting off half the number of trains, for it is an economy to run one train instead of two if everyone stands up. Modern civilisation tends to become impersonal. So many "passengers" are considered as "bods," to use a term applied in the movement of personnel in the Services. Are the "daily oddbods" to be pushed into suburban trains and be told to "jolly well stand"?

The suburban traveller pays high fares for the privilege of standing, unless he is lucky and gets into the train earlier than anyone else. It seems that at last the Woodford and Ilford line passengers have been given their electric trains, but to cover the cost of extra speed and cleanliness of trains they will have to pay for it by standing for longer distances and in greater numbers. I agree with Mr. Pascall on the retention of an adequate seating capacity in S.R. trains. It is hoped the Southern suburban passengers may have seats to sit on rather than hooks to hang on.

Yours faithfully,

W. A. SHEPHERD

11c, Wynnstay Road, Armadale, Victoria

THE SCRAP HEAP

We Regret

In our February 10 issue, a cartoon by Grimes was reproduced in the Scrap Heap, and we regret that acknowledgment was given in error to *The Evening News*. Grimes is a regular contributor of cartoons in *The Star* and acknowledgment should have been given to that newspaper.

The Woman and the Railway

The woman seethed with indignation. "Marched me across to the ticket office, practically as if I was under arrest!"

The man asked "Who did?"

"The ticket collector. Who else would it be? As if it hadn't been enough already to make me nearly miss the train!"

The man seemed to be puzzled. "The ticket collector?"

The woman rejected the suggestion with scorn. "The ticket-collector! The *railway*, of course! The ten-twenty-five I was supposed to be on to London. Fancy having it standing in the same platform with the ten-eight in the first place!"

The man endeavoured to be reasonable. "They're on opposite sides of the platform, though. There isn't any confusion."

The woman brushed the intervention aside. "They let me go through the barrier, and didn't say a *word* to me that I oughtn't to get on it."

The man was struggling to keep up with her. "The ten-eight?"

"No, the ten-twenty-five. I found myself travelling in the direction of Portsmouth! It went out a quarter of an hour early, too, almost immediately after the ten-eight."

"Sounds like a kidnap," the man suggested, adventurously.

"Kidnap! Don't be ridiculous," she told him. "I looked out through the windows, and suddenly found they were streaming with water."

The man abandoned adventure, and renewed his attempt at moderation. "You can't blame the railway if it suddenly pours with rain."

The woman exploded. "Rain! It was *sunny*! We were going through the cleaning sheds!"

The man looked unbelieving.

"I felt like a fish in an aquarium!"

"What were the other people doing?" the man asked.

"Other people?" the woman repeated, beside herself. "The train was absolutely empty! Then a guard sort of person came and asked me what I was doing on it.

"'Doing?' I said to him. 'I thought I was going to London. This is the ten-twenty-five, isn't it?'

"'Not this part of it isn't,' he said.

"I told him it was on the right platform, number four.

"He said 'I suppose you went up the front of the platform?'

"I told him I did.

"He said. 'That's where you made your mistake, you see. Only the back portion of the train was travelling. The front portion was uncoupled and taken into the sheds for cleaning. They'd have told you at the barrier, only I suppose they thought you were travelling on the ten-eight.'"

The man looked as if a matter which had been troubling him was on the point of being made clear. "But why *didn't* you travel on the ten-eight?" he asked.

The woman disdained to enter into explanations. "Because I thought I'd travel on the ten-twenty-five. But I'm *telling* you!" she continued. "The *primitive* things that happened after that you'd never believe! I was *lifted* down *bodily* on to the permanent way, and we *walked* back to the station along the rails! We passed a signal box on the journey, and the man in it looked down out of his window, and the guard person *shouted* to him to tell them to hold the ten-twenty-five."

"Was it still there when you got there?" the man inquired, interested.

"There?" asked the woman. "Well, I should jolly well think it *was* there."

"Was it late?"

"Well, of course it was late. You didn't expect me to hurry, in high heels, on all that clinker, and tripping over sleepers and things?"

"But weren't the people in the train annoyed?"

"They seemed to be getting a bit impatient. Are you trying to put me in the wrong?" she demanded.

"No, of course not. But when did the ticket collector march you across to the ticket office, you said?"

The woman seethed again at the reminder of her wrongs. "That was at the other end. It was ridiculous," she said. "My season ticket happened to be out of date."

[Reproduced by permission of the proprietors of "Punch"

Record Winkle Rail Traffic

In the last five weeks the London Midland Region of British Railways has brought from Eire and Northern Ireland 220 tons of winkles for the London market. At 140 to the pound this represents 69 million winkles.

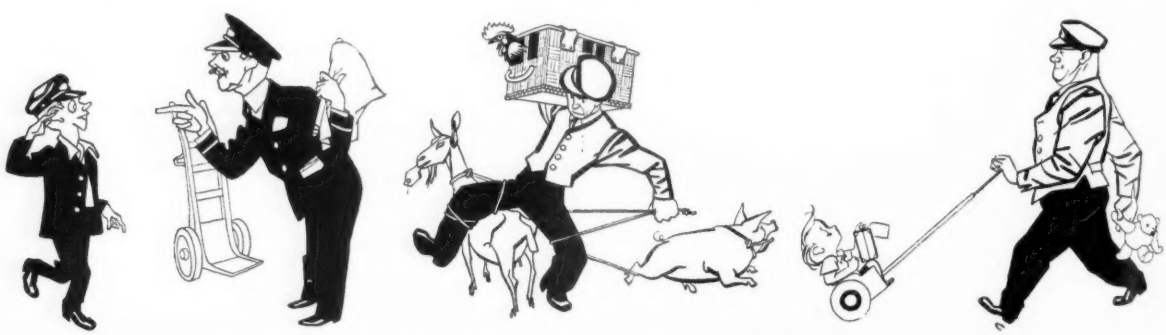
"More Londoners than ever seem to be getting a taste for them," said Checker Sam Tatum, whose job it has been for the last 20 years to deal with the traffic on arrival at Broad Street goods depot.

Politeness Pays

(Railway employees are urged to be more polite in a booklet for new staff)

Oh, Mr. Porter, they say you're very nice,
The railways wou'd not lose you, you're dear at any price:
And members of the public much extol your winsome ways,
You've earned their lasting gratitude and they are full of praise.
Still, Mr. Porter, you are a busy man,
And yet, in spite of this, you help whene'er you can:
Old ladies are so grateful when you show them to their seats,
And gentlemen discuss you in their club and pub retreats.
So, Mr. Porter, please take a tip from me,
Continue your politeness, and welcome courtesy;
Such treatment of the public is worth its weight in gold,
And will help the British Railways their customers to hold.

W. E. N.



Sketches by R. S. Sherriffs reproduced from "British Railways Welcome You," a booklet issued to new entrants to the railway service, to which editorial reference was made in our February 24 issue

OVERSEAS RAILWAY AFFAIRS

(From our correspondents)

SOUTH AFRICA

Assembling of Wagons

The railway workshops at Uitenhage are making good progress with the assembling of wagons of various types with parts supplied by Canada. These shops are now nearing the set production total of 6,450 wagons. Since April, 1949, when a large part of the wagon repair section was converted to a wagon assembly plant, more than 4,000 wagons have been assembled, and the output rate is now 28 a day. The types include flat, ballast, coal, cattle, and fruit wagons.

RHODESIA

Deviations on Wankie-Dett Section

Important deviations are to be carried out on the difficult Wankie-Dett section at an estimated cost of £383,000. The ruling grade and curvature of the existing line are 1 in 60 and 8 ch. radius, and those of the new line will be 1 in 120 compensated and 25 ch. radius.

The scheme for the new line from Wankie to Dett, which will be 48 miles long (two miles shorter than at present), includes provision for sidings or stations at approximately four-mile intervals, thus increasing the capacity of the section.

These improvements will enable the load for a 15th class locomotive to be increased from 785 tons to 1,300 tons, and through loads of this tonnage will be booked to Bulawayo. Because of the difficult country, the lack of contour maps, and the density of the bush, the task of locating a suitable route occupied nearly three working seasons. The subsequent detailed survey when completed will have taken seven months.

FRENCH WEST AFRICA

Extension in Ivory Coast

An extension 217 miles long of the metre-gauge line from Abidjan to Bobo-Dioulasso in the Haute Volta district is under construction. It will run through the comparatively populous area of the Mossi tribe to Ouagadougou.

Work, preceded by an aerial survey, began in 1938, but was interrupted during the war and not fully resumed until the end of 1949. A maximum gradient of 1 in 100 and a minimum curve radius of 500 metres were adopted. Topographical conditions are not difficult, and the only major river to be crossed is the Black Volta, which will be bridged by a low-deck Warren-type bridge of 197 ft. span. In addition, there are six bridges of 82 ft. span, nine of 66 ft. span, and three of 49 ft. span.

There will be 13 stations and five halts. Motive-power depots will be provided at the terminus and midway. Five of the stations will have watering facilities for locomotives. Because of the absence of major engineering difficulties, most of the initial construction work was carried out by manual labour. When the work was resumed, all the earthworks were completed, the engineering works were completed on the first 90 miles or so, and the rails were laid on the first 40 miles. The first section will shortly be opened as far as Houndé, 56 miles from Bobo-Dioulasso.

It was originally intended to use steel sleepers, but, due to the shortage of steel after the war, it was later decided to use sleepers of reinforced concrete. For their construction a special workshop, with an output of up to 600 sleepers a day, was created. At this rate the rest of the line will be fully equipped within three years, when the remaining engineering works are scheduled for completion. A special train is being provided for the construction of the permanent way so that nearly 1,000 ft. of line (sleepers and rails) can be laid in one working day of eight hours.

TASMANIA

Further Projected Modernisation

It is understood that proposals are to be made in the next session of Parliament for approval of considerable capital expenditure to modernise passenger stock and on track work.

After consideration by the Parliamentary Public Works Committee a proposition may also be submitted to Parliament for a new station at Hobart. Although there has been considerable improvement in railway buildings generally, shortage of labour has not yet enabled the Transport Commission to carry out fully the improvements planned some time ago.

The Minister of Transport, Mr. Madden, has stated that within the next two or three years the railways will be able to give a service which will meet all requirements and comparable with the best on other systems.

Publicity Train in Britain Suggested

Councillor L. M. Shoobridge suggested at a recent meeting of Kingborough Council that the Cabinet should request the British Government to make available a locomotive and coaches to tour Britain as a special publicity train to advertise Tasmania with a view to obtaining more British migrants.

Visit of Victorian Transport Minister

Mr. E. F. Guye, Victorian Minister for Transport, visiting Hobart recently, stated that the new articulated railcar recently placed on the evening service between Hobart and Launceston incorporates all improvements associated with comfortable journeys.

He said that the Government had considered it desirable to make an investigation into the manner in which problems of transport co-ordination had been dealt with in other States. He felt that in some respects the organisation in Tasmania could be adopted with advantage by Victoria.

BURMA

Reconstruction and Services

The connection between Ngapugale and Okkan was completed in December, thus making Okkan the railhead in the down direction from Letpadan, with Taikkyi the railhead in the up direction from Rangoon. Bridge reconstruction works up-country are temporarily held up for want of cement, and, since through communication from Rangoon is not expected for some time, the use of lime in place of cement is under consideration.

The passenger service from Letpadan to Ngapugale was extended at Okkan and booking of coaching and goods traffic was resumed from November 30. The shuttle service between Thanbyuzayat and Karokpi was re-introduced from December 16. Services between Sagaing Shore and Wetlet were resumed from December 1, and thereby through communication between Mandalay and Myitkyina was restored.

Rolling Stock

During December three old engines were put into service after heavy repairs. Also, 69 coaches and 148 goods wagons were repaired at Myitnge, Rangoon, and Maiagon. Erection at Rangoon of the first body shell of a new coach from component parts received from India was completed. At Insein Works the experimental building of one goods wagon was also carried out.

PAKISTAN

Railways at the Islamic Exhibition

An International Islamic Economic Conference was held at Karachi, the Federal Capital, from November 25 to December 2, 1949, in the interests of closer economic co-operation between Muslim countries, almost all of which sent delegates and observers. It was opened by the Honourable Liaquat Ali Khan, the Prime Minister. In conjunction with the conference an exhibition was also organised.

The Railway Division of the Pakistan Government provided a stand which proved extremely popular with the public. It was housed in a brightly illuminated and artistically decorated hall. On the walls were displayed maps, photographs, charts, and cartoons giving facts and figures concerning the Pakistan Railways. By sketches, photographs, and models, the evolution of the different means of transport in

the areas now constituting Pakistan could be traced. An enquiry office and booking and reservation office also were included.

Two models were those of *Eagle* and a C.W.D. class locomotive. *Eagle* was the oldest locomotive in use on the North Western Railway. It was built in England in 1869, and continued in service until 1911, when it was withdrawn for preservation. The original engine occupies a place of honour inside the main gate of the North Western Railway locomotive workshops at Moghalpura. The C.W.D. class is the heaviest locomotive now in use in Pakistan.

Models of passenger vehicles included coaches built in 1864 and 1886 as well as recent types. In the centre of the hall was a working model electric railway illustrating single- and double-line working, with signals, cabins, and stations to scale, and full-size signal token instruments. Another model was that of the floating jetties now under construction at Chittagong, designed to deal with 60,000 tons, or 75 per cent. of the jute exported monthly. The working of the metre-gauge wagon ferry across the Brahmaputra between Tistamukh and Bahadurabad also was illustrated by a scale model, with steamer tug, wagon barges, pontoons, and shunting yard on the river bank; the capacity of this ferry is about 400 wagons daily.

CANADA

New Line in Nova Scotia

Completion of a 60-mile railway begun in 1927 has been requested again as a measure to meet rising unemployment in the eastern shore area of Nova Scotia. The railway, as planned in 1927, would run from Sunnybrae, Pictou County, to the harbour town of Guysborough. For three years, work proceeded on the line, which would give Guysborough a connecting link with the C.N.R. terminus at Sunnybrae. The depression caused a halt and work was never resumed.

Coal and Steel Haulage

A record haulage of coal and steel from Cape Breton was established in December by Canadian National Railways. Nearly 5,000 wagons of coal and steel were moved from Sydney Mines, Sydney, and Inverness, almost 700 more than in December, 1948. To meet the increased demand for coal the C.N.R. operated an average of eleven extra freight trains out of Sydney and other points each day. The average train carried 1,500 tons of coal.

ARGENTINA

Radio-Communication Experiments

The General Belgrano Railway is experimenting with a system of train to station radio-communication with a view to its adoption on the principal passenger and goods trains.

International Route Cut

As is usual at the present time of year, heavy rains have caused frequent washouts on the international route to Bolivia and Peru, and services have been suspended for several days.

Northern Transandine Railway

It is reported from Antofagasta that the recently-opened Northern Transandine Railway may be closed shortly due to heavy losses in working. The expected traffic has not materialised because of the impossibility of paying for through despatch of goods and cattle in one currency only and because of the fact that transhipment has to be made at the frontier, in spite of there being no break of gauge. No working agreement has been arrived at, and it is alleged that Argentina has not yet named delegates to the international committee appointed to provide a *modus vivendi*.

SWITZERLAND

Re-purchase of Railways

The re-purchase of privately-owned railways has attracted added interest in connection with proposals for the absorption of some important standard-gauge and narrow-gauge private railways into the Federal Railways. One tentative proposal concerns the Berne-Loetschberg-Simplon Railway, and its branches and associated lines, the most important privately-owned system in the country.

To deal with these problems a special commission was instituted in February. It held its constituent assembly on February 6, when Dr. W. Amstalden was elected Chairman, and Dr. W. Berchtold, Manager of the Third Regional Management, Zurich, of the Federal Railways, was appointed Deputy-Chairman. A special sub-commission to study a possible adaptation of the fares and rates of the Rhaetian Railways to those of the Federal Railways has been formed.

GERMANY

Railbuses for Uneconomic Lines

Two light railbuses, with accommodation for 40 to 50 passengers each, are to be tried on uneconomic secondary lines of the Federal Railways.

Credits for Rolling Stock Building

The Bavarian Government has granted a transitional credit of Deutsche Mark 26,500,000 (about £2,262,000) to the Federal Railways. Of this, the Krauss-Maffei A.G. Locomotive Works, Munich, will account for approximately DM 1,000,000. Süddeutsche Bremsen A.G. for DM 100,000, Waggonfabrik J. Rathgeber (Rastatt) for DM 400,000, and Metallwerke Donauwörth for DM 1,200,000.

Krauss-Maffei is to benefit from an additional credit of DM 3,000,000 for the supply of steam locomotives and Bavarian locomotive and wagon building concerns are to receive additional orders valued at DM 10,000,000 during the current year. These orders will be financed according to an interim general programme envisaging credits totalling DM 30,000,000 for 1950.

Negotiations now in progress concern the granting to the Federal Railways of a further transitional credit of DM 50,000,000 to be spread over the next three years for the modernisation of rolling stock. An instalment of DM 10,000,000 for Krauss-Maffei, Maschinenfabrik Augsburg-Nürnberg, Rathgeber and Donauwörth, and others has been earmarked for the second half of the current year.

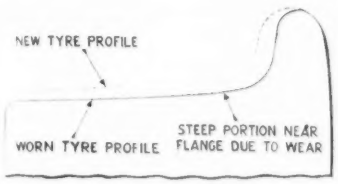
New Day Coaches for the Canadian Pacific

Interior of one of 64 day coaches with reclining chairs, extra-wide windows, and plastic murals, being built by the C.P.R.

Mechanics of Wheel and Rail

Tyre-profiling tests undertaken in New South Wales to reduce oscillation

IN the May 13, 1949, issue of *The Railway Gazette* appeared an article relating to a Paper on "The Motion of a Railway Axle," read by Dr. R. D. Davies and Mr. A. F. Cook (published in the *Journal of the Institution of Mechanical Engineers* for March, 1949), and it refers more particularly to some notes on the subject submitted to us by Mr. W. E. Gelson, Deputy Chief Controller, Research & Design, Indian Railway Board. Mr. Gelson, amongst other matters, dealt with a proposal by the authors of the paper that a groove might be turned on the treads of the tyres of railway wheels at the root of the flange, suggesting that this would avoid contact of the root with the edge of the rail head, and stating that such contact, by varying the relative effective diameters of the treads of a wheel pair in running, is a major factor in promoting instability of vehicle riding.



Typical worn tyre tread profile

In this connection, we are informed by Mr. C. A. Cardew, of the Office of the Chief Mechanical Engineer, New South Wales Railways, that trials of an arrangement similar to that suggested have been made in railway service, and are still in progress. They were the outcome of an investigation which Mr. Cardew, a few years ago, was responsible for initiating and conducting into the lateral oscillations of some large, heavy, four-wheel vehicles, and the bad effects of them on light permanent way on the New South Wales Railways.

The most notable result recorded from the extensive tests carried out was the considerable increase in the severity of the oscillations, which was directly traceable, not to the contact of the flange root with the edge of the rail, but, with worn tyres, to the up riding on it of the steeply-inclined portion of the tread adjoining the flange root; the formation of this, with wear, is a well-known characteristic of all worn or hollow tyre profiles. As illustrating this feature, a special worn tyre profile, indicating this rather ramp-like portion which is found near the flange (due to the heavier wear occurring elsewhere on the tread) is shown in an accompanying diagram.

The tests were made during 1945 and 1946, with two of the vehicles concerned running together in ordinary train service on light rail sections of the New South Wales Railways. As a result of the behaviour mentioned, and recorded as occurring with worn tyre treads, compared with the great improvement after no change other than the removal of the inclined, ramp-like part of these treads shown in the diagram, the idea submitted in the Paper by Dr. Davies and Mr. Cook, and further amplified and illustrated in *The Railway Gazette* as a result of the comment by Mr. Gelson, was conceived, and its application for trial decided on.

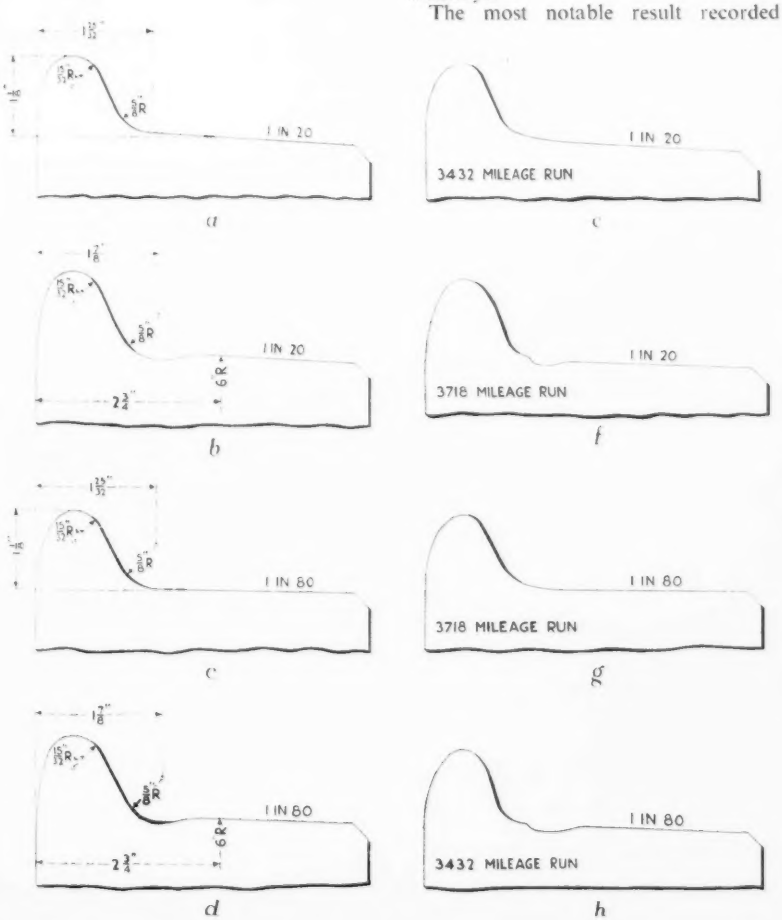
The objective of the tests was, of course, to defer for as long a time as possible the formation of the objectionable tread ramp near the flange in a worn tyre, accomplishing this by the provision of a local depression initially formed in the tread in the region where the latter junctions with the radius of the flange root, the design specially allowing that there should always be a portion of the root radius still remaining available to contact the edge radius of the rail, so leaving this feature of current practice (and any possible effect it may have on derailing tendencies) unaltered.

Some delay occurred in carrving out the proposed trials, but finally four vehicles, each of the same heavy four-wheel design, were put into service in August, 1948, for competitive running trials to determine wear and similar characteristics. The treads of the tyres of the wheels of each were as follows:—

(1) Standard newly turned 1 in 20 tread slope, and standard flange contour.
(2) As above, but with a depressed groove, or recess, in the tread, near the flange root.
(3) Newly turned 1 in 80 tread slope, and standard flange contour.
(4) As above, but with a depressed groove, or recess, in the tread, near the flange root.

In respect of the above, the 1 in 80 contours (both without and with depressed recess) were included for trial because the 1 in 80 slope (without recess) had shown some improve-

(*Continued on page* 253)



Diagrams showing four tyre profiles (left) as put into service for trial and (right) after extensive running on test

The Eastern Punjab Railway

In the first two years in the life of the system notable progress has been made

By Daya Chand,
Chief Administrative Officer, Eastern Punjab Railway

THE two-year-old Eastern Punjab Railway, with a network of 1,889 route miles and 2,139 track miles, serves a wide territory comprising the entire province of East Punjab, Delhi, a portion of the United Provinces, two newly-formed States unions (Himachal Pradesh and the Patiala and East Punjab States Union), and Jammu and Kashmir.

Cities served include two capitals—Delhi, capital of the country, and Simla, provisional capital of East Punjab, which is also one of India's most beautiful summer resorts, situated 6,840 ft. above sea level. Other cities on the system include Amritsar, famous for its Golden Temple, a shrine of the Sikhs, Ambala, and Meerut.

On August 15, 1949, the Eastern Punjab Railway, which came into existence as the result of partition of the Indian railways, a corollary to the partition of the country, completed two years of its life, two years of great storm and stress. It was created from the extensive network of the North Western Railway which remained in India. Whereas during the first year the railway was preoccupied with the immediate problem created by partition and with recovery from their after-effects, the second year was devoted to progressive improvement in service and efficiency.

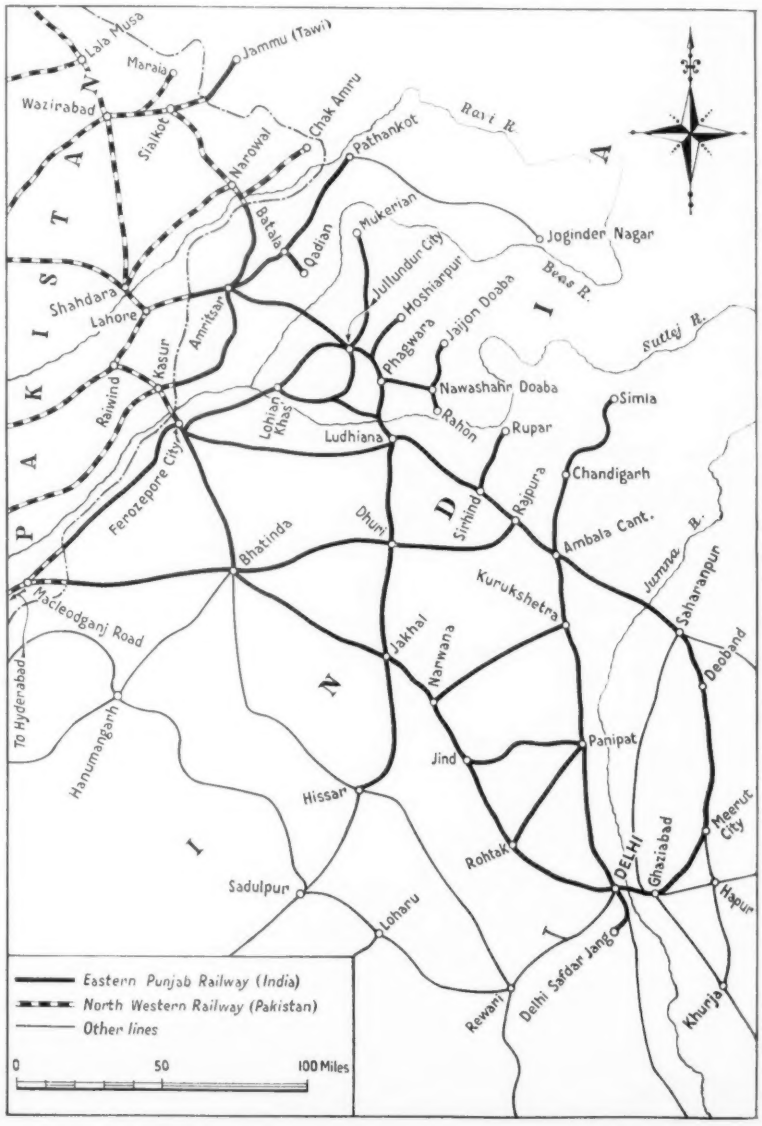
The East Punjab passed through a period of grave emergency after the Partition, and the railway, the lifeline of the province, bore the brunt of the shocks of partition. The first problem with which it was confronted was the evacuation of displaced persons on an unprecendented scale. During the first six months the railway moved about 3,500,000 evacuees, across the border as well as within the Indian Dominion—nearly 20,000 per day. The total figure of evacuees moved up to date is some 4,500,000. No less than 3,000 special trains had to be run.

Although statistics may give some idea of the task, colossal in itself for a railway of its size and life, the magnitude of the problem can be realised only in the light of the difficulties under which the railway was labouring—shortage of locomotives and rolling stock, scarcity of materials, dearth of skilled staff, absence of records, and most important of all, lack of a workshop.

These difficulties were further accentuated by devastating floods that overran several districts during September-October, 1947, when the evacuation was in full swing. Miles of track were washed away by the floods, and bridges and culverts gave way. The East Beyne Bridge near Jullundur, on the Delhi-Amritsar main line, collapsed. Serious dislocation of traffic was averted by the Railway Administration's ceaseless efforts, which made it possible, even in those circumstances, for refugee specials as well as trains loaded with track or bridge repair materials to be run. Public passenger services had to be suspended till the floods had subsided. Repair work was taken in hand immediately and breaches were repaired with the utmost speed. Traffic on the East Beyne bridge was restored within 13 days of its collapse.

The period of crisis lasted till about February, 1948, and was followed by another six months spent in recovery. During the second year of its life the railway entered the third phase of its career, one of steady progress in the face of severe impediments. A year has passed, and the railway can look back on its achievements with pride. Rapid strides have been made in every department; indeed, in some aspects the railway has recorded results which compare favourably with the best performance in the pre-war years.

Partition of the country created a number of problems peculiar to this railway which required long-term solutions. In the first place, with the



The Eastern Punjab Railway, and connections in India and Pakistan

Mughalpura Workshops and Stores having fallen into Pakistan, the railway had to work without a workshop. The war-worn rolling stock suffered a severe strain during the evacuation, and was in urgent need of repairs. The absence of a broad-gauge workshop, needed both for periodic overhaul of stock and for the manufacture of spare parts for running repairs, had a most serious retarding influence on progress.

Coaching stock had thus to be rehabilitated with whatever means the railway could muster. Repair depots were set up at important centres, and work was carried on in the open for want of structural steel. Within a year the output of these depots has grown both in volume and in quality, and by now almost the entire rolling stock on the railway has been rehabilitated. Plans are in hand for a workshop at Jagadhri, about 130 miles from Delhi.

New Traffic Trends

The loss of the port of Karachi as a result of the Partition, and diversion of traffic to Bombay, led to widespread changes in traffic trends, to meet which the railway has had to undertake large-scale expansion and remodelling of goods yards, doubling of tracks, and opening of new lines as well as alterations in passenger train services.

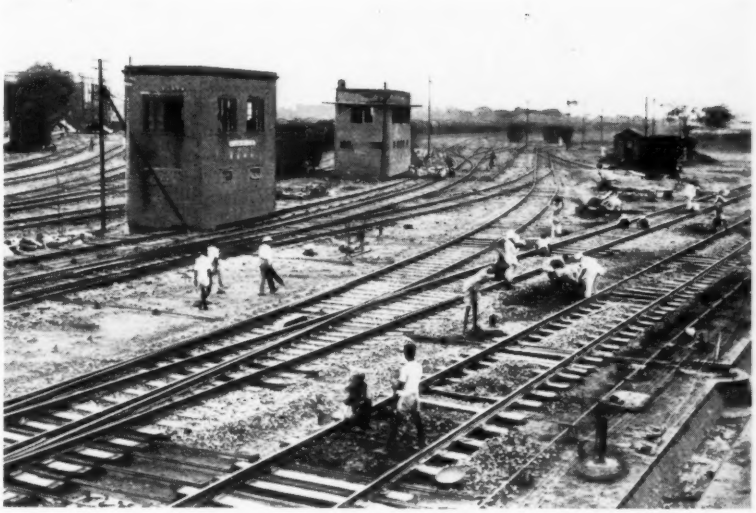
The New Delhi marshalling yard has been remodelled; this required the laying of about 20 miles of track, 150 sets of points and crossings, and 2,600,000 cu. ft. of earthwork, apart from the erection of a number of goods platforms, sheds and office buildings. Simultaneously, a 6½-mile portion of the Delhi - Mathura section, which experienced very heavy congestion, has been doubled, involving the laying of 8½ miles of track, 36 sets of points and crossings, passenger and goods platforms, and two girder bridges; the earthwork amounted to 1,600,000 cu. ft.

The entire work was carried out under traffic, with the least possible interference to the heavy flow of goods and passenger traffic on this section. Terminal facilities have been provided at Amritsar.

Aid to Provincial Reconstruction

The railway has been assisting the provincial Government in its schemes for the economic reconstruction of East Punjab. Assistance is being provided in the resettlement of refugees. Similarly, plans are under consideration for co-operation in the Government's scheme for the establishment of its permanent capital at Chandigarh in the Himalayan foothills.

In particular may be mentioned the construction last year of a new section between Rupar and Nangal Dam for facilitating transport of labour and materials to speed up the Bhakra Dam and the Nangal Power Canal projects. The 35-mile long section has cost the railway about Rs. 10,000,000.



Remodelled yard at New Delhi

Compensation Claims

Another problem created by the Partition and its aftermath was a heavy bill of claims for compensation preferred against the railway for damage, pilferage or wrong despatch of goods. Investigation and disposal of claims have been expedited and the mounting fresh claims has been arrested. Supervision at points of loading, unloading and transhipment has been tightened up, and armed escort has been provided, wherever necessary, on goods trains. A special department has been set up to deal with claims.

During the period March, 1948, to June, 1949, the railway has cleared 64,000 claims cases, an average of 4,000 a month. In March, 1948, the number of cases had accumulated to about 22,000, most of them the legacy of the aftermath of Partition; cases in hand by August 15, 1949, were less than 5,000, almost all of them fresh claims under enquiry.

The Partition also left a legacy of ticketless travel, encouraged chiefly by concessions granted to evacuees, and by the occupation of the railway with the problem of refugee rehabilitation. With the end of the emergency, however, ticketless travel was combated with energy. The strength of the ticket checking staff was augmented, and surprise raids were carried out at frequent intervals at various points on the system. The most deterrent measure has been the appointment of special magistrates to accompany raiding parties and the summary trial of offenders on the spot.

Operating Improvements

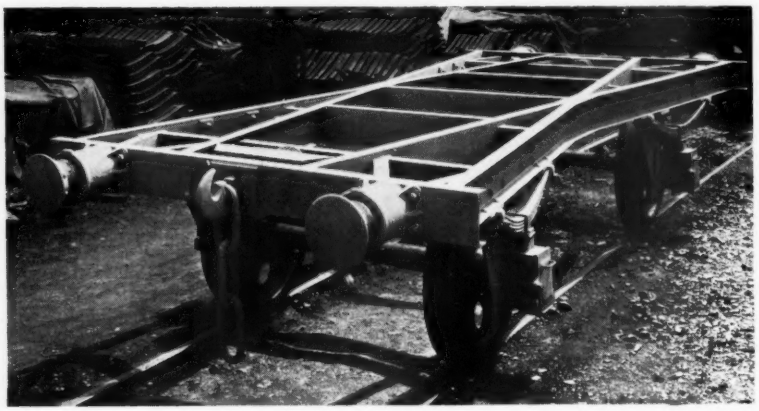
All-round improvement has been effected in operating. Great emphasis has been laid on the acceleration and punctuality of passenger and goods trains. The percentage of passenger trains on time increased from 52 in March, 1948, to 86 in March, 1949.

(*Continued on page* 257)

Rebuilt East Beyne Bridge near Jullundur on the Delhi-Amritsar line, Eastern Punjab Railway

Wagon Shops at Ashford Works, Southern Region—2

Production of special wagons, and underframe design and testing



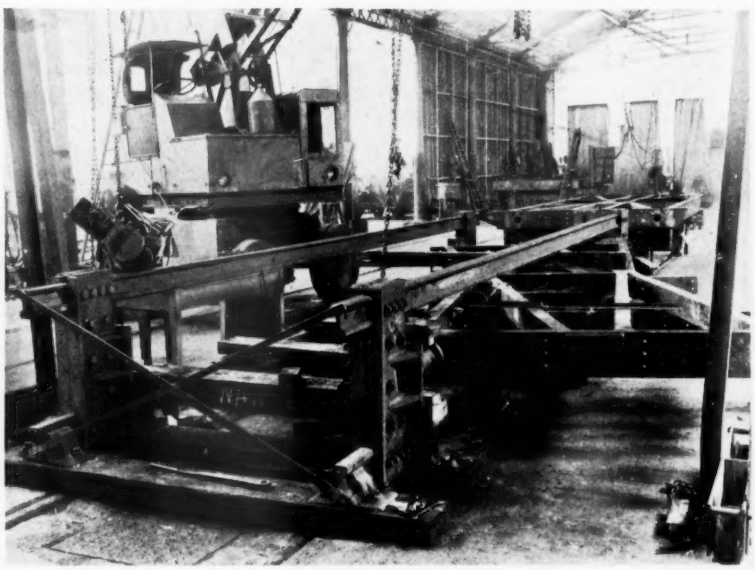
Triangulated underframe for 13-ton wagon

IN addition to the more normal types of standard wagons which form the majority of the new building carried out at Ashford, a number of more specialised types of vehicle is built. Among those produced in recent years are the shock-absorber wagon, the all-steel mineral wagon, the snow plough, the passenger luggage van, the ballast brake van and the all-steel bogie hopper wagon.

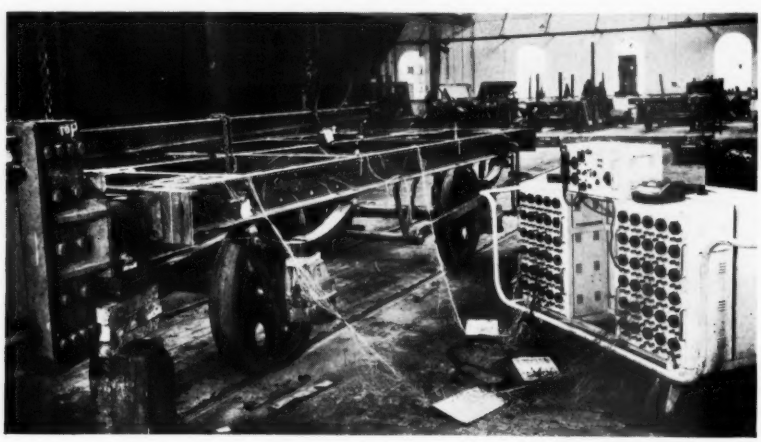
Distortion of underframes, and the desire to reduce tare weight, save steel and simplify production, resulted in steps being taken to design an improved underframe. The outcome of this was the triangulated underframe. This frame was compression-tested in the plant illustrated in this page and was found to possess considerably greater strength and rigidity than the standard wagon underframe.

The testing plant was the first to be constructed in the country. It consists of two frames which fit over the length of the underframe, provision being made for the insertion of a hydraulic jack—of 50 tons capacity for wagons and 100 tons capacity for coaches—between the end of each frame and the headstock of the vehicle. It is thus possible to reproduce the effect of heavy normal loading on the buffers, or by the use of one frame and jack placed diagonally, asymmetrical loading, as might be encountered under certain conditions in traffic, can be applied. In addition to the physical measurement of deflection produced by the loading, stress in the various members is measured by the attachment of strain gauges connected to electrical recording apparatus, as shown in the illustration at the foot of this page.

Shock-absorber wagons of the type under construction at Ashford Works have been in use for some years and as a result of their satisfactory performance,



Triangulated underframe undergoing diagonal compression test



Wagon underframe undergoing diagonal compression test

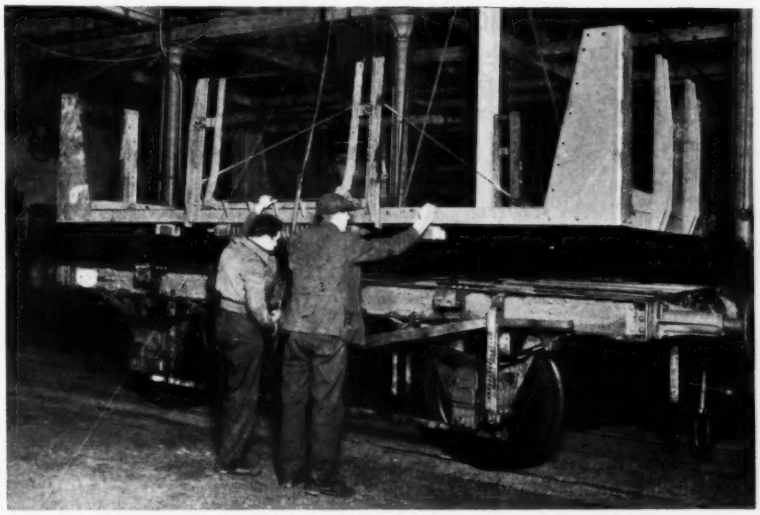
additional wagons of this design are being put into service.

The L.M.S.R. claimed to be the pioneer railway to introduce the shock-absorber wagon and the first of 100 such wagons, built at Derby, was described in our August 20, 1937, issue. The idea was formulated by Mr. E. J. H. (now Sir Ernest) Lemon, then Vice-President of the Railway Traffic Operating & Commercial Section, and the design was prepared by Mr. W. A. (now Sir William) Stanier, Chief Mechanical Engineer, in conjunction with the Chief Commercial Manager's Research Section of the L.M.S.R.

The underframe is of somewhat conventional design. On it are riveted bearer pads, and the wagon body is a separate unit consisting of a steel framing with reinforced sides and ends into which the timber forming the body is

fitted. The body is supported by and connected to the underframe by slides which permit lateral movement of the body, the control of which is governed by the shock absorber equipment fitted to the longitudinal channels forming the wagon flooring, and consists of steel coil springs and rubber pads carried between brackets attached to the longitudinals.

The effect of longitudinal shocks delivered to the wagon is to a considerable extent absorbed by the compression of the springs, which, in addition, maintain the wagon body in a central position on the underframe proper.



Lowering body framing with its shock-absorbers on to underframe

Rake of completed shock-absorber wagons awaiting despatch from works

SKAL CLUB OF MANCHESTER.—Over 80 members were present at the annual general meeting of the Skal Club of Manchester held at Sefton's Hotel, Corporation Street, Manchester, on February 9. The following officers were elected: President, Mr. R. C. Flowerdew, District Passenger Manager, Manchester, London Midland Region, British Railways; Vice-Presidents, Messrs. W. H. Eccles, Cunard White Star Line, and L. R. Stanton, Travel Agent; Honorary Secretary, Mr. A. C. L. Davies, Commercial Representative for Sabena; Honorary Treasurer, Mr. C. S. Robinson, Travel Agent; Honorary Press Representative, Mr. N. Mottershead, Public Relations & Publicity Representative, Manchester, British Railways; Members of Council, Messrs. C. S. Allden, N. Bywater, G. A. Dykstra, J. Farber, A. Fleming, R. Hannant, R. Holt and W. H. Lucas. Appreciative reference was made of the services given by officers, members of the council, and the entertainments committee, all of whom had contributed to the successful social gatherings throughout the year; the present membership of the club was now 104.

NEW LONDON TRANSPORT BUS POSTS.—London Transport is shortly to introduce to the City area a new type of bus post which is described as combining beauty and visibility with ease of maintenance. Many new designs have been tried, and the model finally selected is shaped like a sword and streamlined from tip to pavement level. At present there are more than 30 different types of bus and tram signs in London; the new one is to be adopted as the standard post for the future, whenever new signs and replacements are needed.

Bridge Reconstruction in Eastern Belgium

Two large bridges destroyed in the war rebuilt to the original general design

THE reconstruction of two important railway bridges near the eastern frontier of Belgium is described in detail in a recent issue of *L'Ossature Métallique*, a monthly review published by the Information Centre of the Belgian and Luxembourg steel industry.

One of these is the well-known Moresnet Viaduct, the largest railway bridge in Belgium (3,632 ft.). This viaduct, which carries the double-track railway between Aachen (Germany) and Tongres across the valley of the river Gueule, was originally built by the Germans during the 1914-18 war. It was damaged in 1940, repaired by the Germans and destroyed by them during their retreat in 1944. The reconstruction was carried out between 1945 and 1948 by Blaton-Aubert (for concrete works) and Baume et Marpent (for steelwork), and is described by Monsieur A. Dehaen, a civil engineer attached to the Belgian National Railways.

The viaduct is a deck structure consisting of 22 identical steel spans 157½ ft. in length, resting on two abutments, five abutment piers and 16 ordinary piers all of concrete; 1,150 ft. at the Aachen end of the viaduct are on an 80-ch. curve. The height of the piers varies between 95 ft. and 170 ft. The steel trusses are 14 ft. 9 in. apart, have parallel top and bottom chords and are 24 ft. 7 in. deep; they are divided into six 26 ft. 3 in. panels and weigh about 260 *tonnes*. The gaps at the abutment piers are bridged by 23-ft. connecting spans resting on brackets fixed to the cross-girders of the adjacent main spans.

Moresnet Viaduct after destruction in 1944

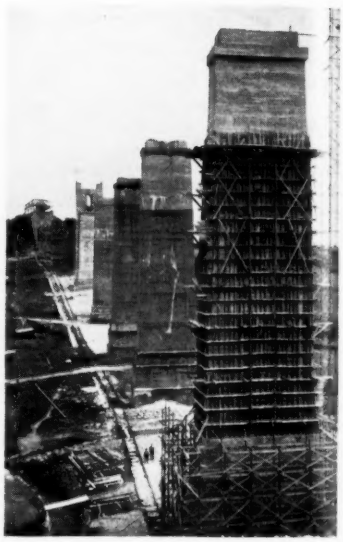
Extent of Damage at Moresnet

As a result of the German destruction, eleven of the 22 spans, three of the five abutment piers and one of the 16 ordinary piers were destroyed; two other piers were slightly tilted by the weight of the steel debris leaning against them. The total weight of the destroyed steelwork was 3,000 *tonnes*, 810 of which could, however, be re-used.

For this reason, and because half of the spans were still intact, it was decided, in principle, to rebuild the bridge to the original design, but the opportunity was taken to strengthen the existing spans, and to design the new ones, for 22-*tonne* axle loads. The diagonal members in the end panels and the existing verticals were strengthened, and two intermediate vertical members were added. Furthermore, all the girder bearings were replaced by stronger ones.

Debris clearing began in 1944 and the dismantling of the steelwork in July, 1945. With the aid of a derrick with a 177 ft. jib and a gantry crane 157½ ft. high, the damaged steelwork was completely dismantled, conveyed on cable-hauled rail wagons to the foot of the Aachen-side abutment, lifted by a locomotive crane on to the railway line and sent to the shops, where the recoverable parts were carefully examined and repaired; the remainder were sold as scrap. This took a year to complete, but meanwhile the reconstruction of the piers was taken in hand. The tilted piers almost reverted to the vertical position when the debris was removed; each was reinforced by a concrete jacket. These jobs, requiring more than 350,000 cu. ft. of concrete, were completed in July, 1947.

For the erection of the new steel spans, the method adopted avoided the construction of any falsework on the broken ground in the valley. A service span with trusses spaced 23 ft. apart and 183 ft. 9 in. in length—8 ft. 2½ in. wider and one panel longer than the standard span of 157½ ft., but otherwise of similar construction—was erected over the Aachen-side abutment and fitted with a launching nose 157½ ft. in length. It was then hauled across the first opening on four sets of rollers, so that the nose came to rest on a temporary support surmounting the first pier.



Rebuilding piers, Moresnet Viaduct

The necessary tractive effort (approximately 2 *tonnes*) was provided by the locomotive crane, pulling a cable through block and tackle with a 1 in 20 ratio, so that the crane had to cover 20 times the distance the span was moved. This process lasted about 10 hr. When the service span was in position across the gap, the lower cross-girders and wind bracings were removed and suspended below the span so as to carry a working platform on which the permanent bridge span could be erected. The steelwork was brought to site with the aid of the locomotive crane and a travelling gantry crane mounted inside the service span. When the erection of the permanent span was completed, the working platform was removed and the

Launching new spans, Moresnet Viaduct

cross-girders and bracing of the service span re-fitted, so that the latter was ready to be launched across the next span in a similar way; the procedure was repeated for each of the new spans. Where the spans were intact, the service span was moved across them to the next new one.

Erection began in November, 1946, but was held up during the hard winter of 1946-47. From May, 1947, onwards, it proceeded without interruption until completion in December, 1948. During the final stages, the rate of progress was about 18 days for the erection of each span, and 25 days for the dismantling of the working platform, movement of the service bridge and re-erection of the working platform for the next span.

Albert Canal Bridge

A single-line bridge over the Albert Canal at Gellik near the Dutch border, carries the Hasselt-Maastricht railway which connects Belgium with the Dutch province of Limburg. It was built in 1938 when the canal was under construction, enabling the falsework to be erected on the dry bed of the canal. The bridge was destroyed in May, 1940, and reconstructed in 1946 to the same design and by the original designers (S.A. La Brugeoise et Nicaise & Delcuve). The description of the bridge is by the contractors' chief engineer, Mr. W. Kerkhofs.

Near Gellik, the Albert Canal flows through a fairly deep cutting, so that the water level is about 46 ft. below the natural level of the ground. The overall length of the bridge (590 ft.) is therefore considerably greater than the width of the canal proper (210 ft.). Because of the nature of the soil, a system of continuous girder spans had to be avoided. The solution adopted is a statically determinate system of two plate girder approach spans of 108 ft. 3 in., resting on the abutments and intermediate piers, and one 370-ft. central span of the Vierendeel type. 21 ft. 8 in. spans cover the gaps across the piers between the central span and the approach spans.

The 9 ft. 2 in. deep main girders of the latter are welded, but in the case of the central span, riveting was preferred because of the important dynamic forces. In spite of the fact that the parabolic upper chords could be wind-braced over a great part of their length, it was found necessary to use box girders to avoid buckling. The decking consists of riveted cross-beams, spaced 30 ft. 10 in. apart, two main stringers 3 ft. 3½ in. deep, and small lateral stringers to carry the planking. As the bridge is for a single line, and the ratio of length to width is comparatively great, the wind-bracing is of particular importance. For æsthetic reasons, the cross-beams between the top flanges were designed to match the main trusses, although latticed girders would have been slightly cheaper.

The original construction in 1938 was completed within 85 working days. In 1946, the bottom chords were erected on a service span by means of a floating crane, whilst the top flanges were erected with derricks mounted on the parts already erected. The bridge was tested by one, two and four 150-*tonne* locomotives coupled together (*a*) running at 70 m.p.h. and (*b*) standing on the bridge for one hour.

Completed new viaduct at Moresnet

Mechanics of Wheel and Rail

(*Concluded from page* 247)

ment as to lateral oscillation over the 1 in 20 (also without recess) on some of the tests, though by far the most outstanding factor was that such improvement as was obtained from varying or flattening tread slope was inconsequential when compared with the importance of preventing, as far as possible, the formation of that sort of contour which normally follows the occurrence of heavy tread wear.

The above tyre contours as put into service for trial were turned to special profile gauges, with the actual contour for each wheel resulting being then recorded as a diagram by means of a tyre profiling instrument, further sets of profile diagrams, similarly, taken, were obtained some months later and after a few thousand miles of running.

Diagrams representative of each of these tyre contours and conditions of service are reproduced. In these diagrams there will be noted a step developed after service at the junction of the flange root and the recess due to flange wear, but as it is the root radius (as in normal tyre profiles) and not the step itself, which still makes contact with the rail edge, its development, at least at this stage, does not appear to call for adverse comment.

The trials are being continued, both by further running of the same vehicles and by the inclusion of another batch in service, for extending the scope of the data obtained.

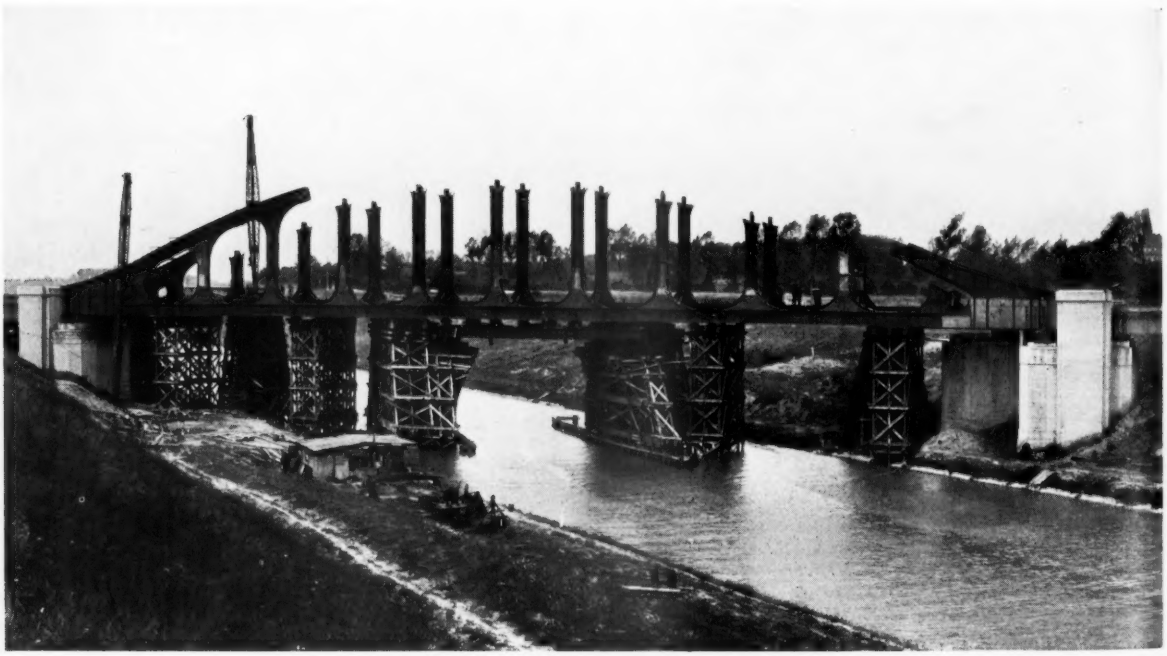
An account has been written of the investigation, the methods of recording on the tests, and the results obtained. This and a numerous collection of graphical oscillation charts obtained from the vehicles concerned, when running at various speeds, with different types of tread contour and under various conditions as to loading, have been preserved as a record and a source of useful information.

AWARD TO PORTER AT MARKS TEY.—The Eastern Region has announced that an award has been made to Mr. Everitt, a porter at Marks Tey, for prompt action and initiative. On July 29, last year, the 6.20 p.m. train Yarmouth to Liverpool Street, although not booked to stop, came to a stand at Marks Tey and a number of girls alighted from the rear of the train and ran forward to rejoin it further up. The train started to move away from the platform before the last girl had entrained, and she slipped, her legs going down between the footboard and platform. Porter Everitt rushed forward, caught and held the girl until the guard, whose attention had been attracted by the commotion, brought the train to a stand. There is little doubt that but for Mr. Everitt's action the girl would have suffered serious injury.

Bridge Reconstruction in Eastern Belgium

(See article on page 252)

Original bridge at Gellik, as built in 1938 *before cutting of Albert Canal, and destroyed in* 1940



Rebuilding of Gellik Bridge to original design

RAILWAY NEWS SECTION

PERSONAL

MINISTERIAL APPOINTMENTS

Mr. Alfred Barnes has been re-appointed Minister of Transport in Mr. Attlee's new Ministry.

Among the changes announced are the appointments of Mr. James Griffiths as Secretary of State for the Colonies and Mr. P. C. Gordon-Walker as Secretary of State for Commonwealth Relations; both become members of the Cabinet.

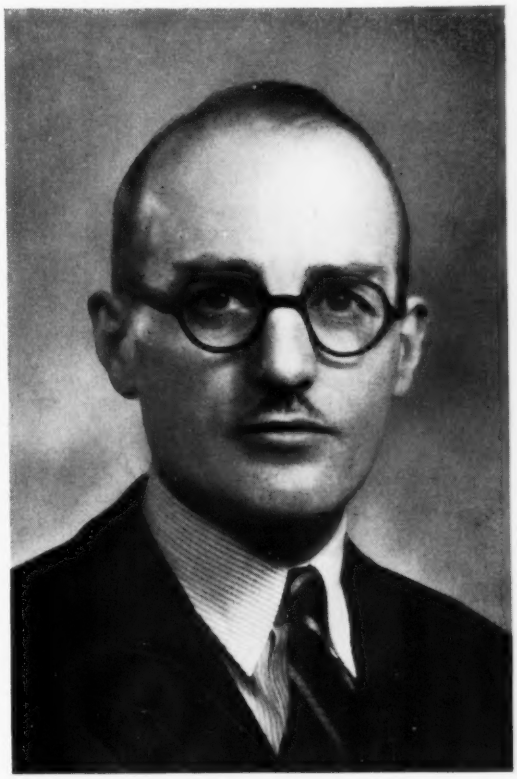
The Irish Minister for Industry & Commerce has re-appointed Mr. T. C. Courtney as Chairman of Coras Iompair Eireann for one year as from February 18, 1950.

Mr. M. S. Wilson has been re-appointed Commissioner for Transport, Tasmania.

Mr. T. Marsland, Assistant Chief Mechanical Engineer, Western Australian Government Railways, who has been Acting Chief Mechanical Engineer since the death of Mr. F. Mills, has been appointed to succeed Mr. Mills as Chief Mechanical Engineer.

Mr. G. K. Nield has been appointed Assistant Public Relations Officer for Europe, Canadian Pacific Railway. Since returning to the company from the Army at the end of 1945 he has been in charge of Press liaison.

Mr. N. F. Shillingford, Chief Accounts & Finance Officer, Rhodesia Railways, has proceeded on leave prior to retirement, and Mr. L. A. W. Hawkins has been appointed Acting Chief Accounts & Finance Officer. Mr. Hawkins is Vice-Chairman of the Rhodesia Section of the Institute of Transport, and before joining the Rhodesia Railways in April, 1946, he served with the Auxiliary Air Force from 1939 as a Squadron-Leader.



Mr. J. F. Harrison

Appointed Mechanical & Electrical Engineer, Eastern & North Eastern Regions

We regret to record the death on February 26, at the age of 65, of Lord Henderson of Ardwick, who was President of the National Union of Railwaymen from 1933-36.

BRITISH RAILWAYS APPIONTMENTS

The following appointments are announced by British Railways, with effect from January 1, 1950:—

Mr. G. C. Gold to be Assistant Mechanical & Electrical Engineer, Eastern & North Eastern Regions, Doncaster.

Mr. L. Reeves to be Assistant Carriage & Wagon Engineer, Eastern & North Eastern Regions, Doncaster.

Mr. H. P. Harper to be Staff Assistant to Mechanical & Electrical Engineer & Carriage & Wagon Engineer, Doncaster.

Mr. C. Little to be Indoor Assistant (Clerical), Mechanical & Electrical Engineer's Office, Doncaster.

Mr. J. W. Yates to be Indoor Assistant (Clerical), Carriage & Wagon Engineer's Office, Doncaster.

Mr. J. F. Harrison, M.I.Mech.E., M.I.Loco.E., Assistant Chief Mechanical Engineer, Eastern & North Eastern Regions, British Railways, who, as recorded in our February 10 issue, has been appointed Mechanical & Electrical Engineer, Eastern & North Eastern Regions, Doncaster, was educated at Malvern Wells and Wellington College. He entered the service of the Great Northern Railway in 1921, and became a pupil of the late Sir Nigel Gresley at Doncaster. Mr. Harrison was Supernumerary Foreman in the Locomotive Running Department, L.N.E.R., at Doncaster, and afterwards at Kings Cross, during 1924 and 1925. He became Running Shed Foreman in charge of Wigan and St. Helens in 1926; Technical Assistant to the Locomotive Running Superintendent at Liverpool Street in 1929; Assistant to Locomotive Works Manager, Chief Mechanical Engineer's Department, Gorton, in 1930; Assistant Locomotive Works Manager, Doncaster, in 1937; Locomotive Works Manager, Gorton, in 1938; Mechanical Engineer, Gorton, in 1941; and Mechanical Engineer, Cowlairs, in 1945. He was appointed Assistant Chief Mechanical Engineer at Doncaster in 1947.

Mr. J. R. Pheazey, Works Director of Standard Telephones & Cables Limited, has been elected President of the Engineering & Allied Employers' London & District Association.

B.T.C. RESEARCH INFORMATION DIVISION

Mr. C. E. R. Sherrington has been appointed by the British Transport Commission as Director of the Research Information Division of the Department of the Chief Research Officer, St. Pancras Chambers, Euston Road, N.W.1. He will be responsible for the development of a research information service which will form part of the Commission's research organisation and will be designed to assist all Executives and agencies of the Commission. The Railway Research Service, under Mr. Sherrington, will in future form an integral part of the Research Information Division, and will preserve its identity in its contacts with transport organisations overseas. It will continue to publish a regular bulletin.

Mr. F. W. Case has been appointed a Director of the Channel Tunnel Co. Ltd., in place of Mr. John Elliot, who has resigned.

Mr. G. C. R. Eley has been appointed a Director of Thomas Tilling Limited.

TRANSPORT USERS' CONSULTATIVE COMMITTEE FOR LONDON

The Minister of Transport recently appointed the Transport Users' Consultative Committee for London, under the provisions of section 6 of the Transport Act, 1947. The committee covers the area of the London Transport Executive, and will be concerned with both passenger and goods traffic. It may consider any matter (including charges) affecting the services provided by the British Transport Commission in London. In particular, it must consider any such matters which arise from representations by users of those services, or are referred to it by the Minister or the Commission. The recommendations or conclusions of the committee will be notified to the Central Transport Consultative Committee for Great Britain and to the Commission. The Chairman is Alderman J. Fitzgerald and the other members are:—

Messrs. W. F. Podmore, H. C. Crane, E. E. Young, L. G. Burleigh, E. W. Rainer, F. Whittock, A. I. Anderson, J. Crowley, Councillor H. J. E. Palethorpe, Councillor G. Allison-Beer, Alderman E. A. Wood, Alderman F. L. Corrick, Councillor A. C. Marshall, Alderman W. G. Fiske, Mrs. T. Cazalet Keir, Mrs. D. Robinson, Messrs. K. W. C. Grand and J. H. F. Benford.

The Secretary of the committee is Mr. G. Cole Deacon, and its offices will be at 22, Palace Chambers, Westminster, S.W.1.

Mr. R. B. McColl has resigned as President, a Director and a member of the executive committee of the American Locomotive Company, the board of which has accepted his resignation "with deep regret and great appreciation for his more than forty years service with the company." The offices of Chairman and President have been combined, and Mr. D. W. Fraser has been appointed to them.

Mr. M. E. F. Gaveau

Appointed Secretary, French Railways Limited, London

Mr. A. W. Tait

Appointed Principal Costs Officer, British Transport Commission

Mr. A. L. Owen

Appointed District Engineer, Bradford, London Midland Region

Mr. M. E. F. Gaveau, who, as recorded in our January 27 issue, has been appointed Secretary of French Railways Limited, London (General Representatives in Great Britain of the French National Railways), was born in Paris in 1913, the son of a French Naval officer, and was brought up and educated partly in France and partly in England, where in 1931 he received training on the Southern Railway. In 1932 he joined the London office of the former French State Railways, and at the time of nationalisation of French railways in 1938 he was taken into the new representation, where he held various appointments. Mr. Gaveau was mobilised in the French Army at the outbreak of war, and became a liaison officer with the B.E.F. He was evacuated through Dunkirk, and was demobilised in London in June, 1940. He volunteered for the British Army in the same year, in which he received a commission. He was parachuted into France in 1942, and spent 13 months in the occupied zone as head agent of a large resistance organisation. He was arrested by the Vichy police, but managed to escape. After recall to England in 1943 he held an appointment in the War Office before being sent later on to the Far East, where he remained until the end of the war, during which he had attained the rank of Captain and had been awarded the French Croix de Guerre and mentioned in dispatches. Mr. Gaveau rejoined the French National Railways in 1946 as Freight Manager in the London office. He was appointed Assistant General Representative in the U.S.A. and Canada in June, 1948, the post he has held until his present appointment as Secretary of French Railways Limited in London.

Mr. A. W. Tait, who, as recorded in our January 6 issue, has been appointed Principal Costs Officer, British Transport Commission, joined the Great Western Railway in 1926 in the Chief Accountant's Office. He had experience in various sections of the office and on the personal staff of the Chief Accountant, and in 1937 was selected for a year's course of special training in the accounting procedures of the Traffic, Engineering and Locomotive Departments. In 1938 he was appointed Personal Clerk to the Chief Accountant, and in January, 1940, Assistant Secretary of the R.E.C. and Railway Accountants' Committees. During the war years Mr. Tait was engaged on work involved in the financial arrangements under Government control, and in 1945 he was appointed Assistant to the Chief Accountant, G.W.R., his special duties in that post including preparation of evidence for the Charges Consultative Committee in 1946, and financial liaison with the Hay's Wharf Cartage Group (Pickfords, Carter Paterson and Cooks); from 1946 to 1949 he was

Mr. L. Meara

Road Transport Controller, Scottish Region, who has retired

Mr. G. Lochrie

Appointed Cartage Assistant to Commercial Superintendent, Scottish Region

The late Mr. E. T. J. Evans

Works Manager, Carriage & Wagon Works, Swindon, G.W.R., 1922-46

Accountant of Olley Air Services Limited. On nationalisation he became Chairman of the Accountants' General Expenditure Sub-Committee, which position, together with that of Assistant to the Chief Accountant, Western Region, he now vacates. During 1948 Mr. Tait acted as assessor for financial matters and as secretary to Sir James Milne's inquiry into transport in Ireland. He is a member of the Association of Certified & Corporate Accountants.

Mr. Arthur Lloyd Owen, A.M.I.C.E., who, as recorded in our January 20 issue, has been appointed District Engineer, Bradford, London Midland Region, British Railways, entered the District Engineer's Office at Bangor, L.M.S.R., in 1929, and under that department was Resident Engineer on the Wirral electrification scheme (1937) and Resident Engineer at Manor Road Station and various works on the Wirral and at Birkenhead (1939). Mr. Owen was made Engineering Assistant to the District Engineer, Liverpool, in 1943; Acting Assistant to the District Engineer, Crewe, in January, 1946; and nine months later was attached to the staff of the Chief Civil Engineer at Watford H.Q. for supervision of oil fuel depots. In April, 1947, he became Assistant to the District Engineer, Bradford. He was a member of the L.M.S.R. (and later London Midland Region) Permanent Way Educational Panel, 1946, and lecturer at the supervisors course at Derby School of Transport until the ber of the N.E.R. Cottage Homes Fund.

Mr. L. Meara, A.M.Inst.T., Road Transport Controller, Scottish Region, British Railways, who, as recorded in our February 17 issue, has retired, commenced his railway career in the Stationmaster's Office at Hull (Paragon), North Eastern Railway, in 1899, and in 1908 was appointed to the District Superintendent's Office, Hull, moving subsequently to York, where he became Personal Clerk to the Passenger Manager. In 1914 Mr. Meara was attached to the Staff Section of the General Manager's Office, returning the following year to Hull as Head of the Staff & Cartage Section of the Divisional Goods Manager's Office. He was appointed Goods & Passenger Agent, Grangemouth, L.N.E.R., in 1932, and a year later became Assistant Cartage Manager, Scottish Area, L.N.E.R. In 1935 he was made Cartage Manager, Scottish Area, the appointment he held at the time of nationalisation, when he took over the whole of the cartage arrangements of British Railways in Scotland under the title of Road Transport Controller. During the recent war Mr. Meara was the L.N.E.R. representative on the Glasgow Port Transport Executive, and among other bodies of which he has been a member are the Road-Rail Licensing Sub-Committee, London; Road-Rail Southern Scotland Conference and the Scottish Milk Marketing Board Haulage Committee. Mr. Meara was the first District Chairman of the L.N.E.R. North Eastern Area Athletic Association, and a founder member of the N.E.R. Cottage Homes Fund.

Mr. G. Lochrie, who, as recorded in our February 24 issue, has been appointed Cartage Assistant to the Commercial Superintendent, Scottish Region, British Railways, has hitherto been Assistant to the Road Transport Controller, Scottish Region. He was educated at Paisley Grammar School, and joined the Caledonian Railway in 1913. After training at various stations, and on winning the directors' prize at the senior clerical staff examination, he was transferred to the Goods Manager's Office in 1919. He had experience in several sections, and in 1930 was appointed to take charge of the Goods Train Services Section of the Goods Manager's Office, L.M.S.R., in Glasgow. In 1935 he was promoted Clerk-in-Charge, Commercial & Development Section, Commercial Manager's Office, Glasgow, a post he held until appointed Assistant to Road Transport Controller, Scottish Region, in May, 1948. In 1938 Mr. Lochrie was selected to attend the opening session of the L.M.S.R. Staff College, Derby. On the outbreak of war his services were lent for a period to the Ministry of Food as Food Movement (Railway) Officer for the West of Scotland. On returning to railway service he became a member of the Glasgow Port Transport Emergency Committee. Since 1935 he has served on many Railway Clearing House committees, and he was a member of the Southern Scottish Road-Rail Conference from its inception, and ultimately Chairman of the Rail Panel.

We regret to record the death on February 25 of Mr. Edwin Thomas James Evans, who retired in April, 1946, from the position of Works Manager, Carriage & Wagon Works, Swindon, Great Western Railway. Mr. Evans entered that company's service as an apprentice in 1896. On completion of his apprenticeship he served for a short time in the testing house, and in 1903 entered the drawing office. In 1916 he was made a Locomotive Factory Inspector, and three years later was appointed Assistant Divisional Superintendent at Wolverhampton. In the next year he was made Assistant Manager of the Carriage & Wagon Works at Swindon, and in 1922 was appointed Manager.

Mr. R. W. L. Harris is resigning shortly as Registrar & Secretary of the Professional Engineers Appointments Bureau, a post he has held since the Bureau commenced work in 1945, to take up an appointment with the firm of Preece, Cardew & Rider, Consulting Engineers.

After 33 years association with the Manchester Ship Canal Company, the last 17 of them as Chairman, Sir Frederick J. West, who is now 77 years of age, is retiring. His successor will be the present Managing Director, Mr. Leslie Roberts, who will combine that office with that of Chairman.

South African Railways

Among senior appointments recently made on the South African Railways, in addition to those recorded in our last week's issue, are the following:—

Mr. W. G. Ramsay, Manager, Road Motor Services, Headquarters, to be Assistant Chief Mechanical Engineer (Automotive), Johannesburg.

Mr. D. F. Toerien, Relieving System Manager, Headquarters, to be Chief Stores Superintendent.

Mr. J. H. Vlok, System Manager, Kimberley, to be System Manager, Bloemfontein.

Mr. G. W. Reid, Relieving System Manager, Headquarters, to be Chief Superintendent (Road Motor Services), Headquarters.

Mr. J. A. Fourie, Superintendent (Staff), Johannesburg, and Mr. O. G. Thiel, Superintendent (Operating), Cape Town, to be Relieving System Managers, Headquarters.

Mr. A. Swart, Superintendent (Staff), Headquarters, to be System Manager, Kimberley.

Colonial Engineering Problems

A conference designed primarily for members of the Colonial Engineering Service and for those otherwise connected with civil engineering work in the colonies will be held in London on July 3-7 under the auspices of the Institution of Civil Engineers.

Technical sessions at which papers will be presented for discussion include those of July 4, when Mr. J. R. Farquharson, Deputy General Manager and Chief Engineer of East African Railways & Harbours, will submit a paper on "Railway and Dock Problems in East Africa," and Mr. R. D. Gwyther, of Messrs. Coode, Vaughan-Lee, Frank & Gwyther, one on "Colonial Harbours and Wharves"; and of July 7, when Mr. W. R. Scott will speak on problems encountered in the construction of the Livingstone Airport, Northern Rhodesia.

Visits will be paid to engineering plants, including the Bankside Generating Station, on July 5, and, on July 6, the Thamesside Works of the Port of London Authority. An official reception will be held at the Institution of Civil Engineers on July 7.

The conference is not restricted to corporate members and students of the Institution; and non-member engineers and others interested may attend if application is made to the Secretary. A capitation fee will be charged and will include the cost of the visits, and so on and of a copy of the proceedings, which will include the papers and the discussion thereon.

For corporate members and students of the Institution the fee will be £3 3s. (£4 4s. if accompanied by a lady), and for non-members £5 5s. (£6 6s. if accompanied by a lady). For those unable to attend the conference the proceedings will be available later. Particulars may be obtained from the Secretary, Institution of Civil Engineers, Great George Street, London, S.W.1.

The Eastern Punjab Railway

(*Concluded from page* 249)

Wagon turn-round has also considerably improved; from 10 days in March, 1948, it has come down to 4.7 days during August, 1949, and this has enabled the railway to handle the increased goods traffic offering since the partition.

The Eastern Punjab Railway was the first in India to withdraw restrictions on goods traffic imposed in wartime. The wagon situation has improved so much that all goods traffic is being accepted for booking without priority controls.

Despite shortage of coaching stock, the railway has gone ahead steadily in increasing the number of passenger trains; an indication is the rise in the daily passenger train mileage from 12,142 in April, 1948, to 17,032 in April, 1949. Many additional amenities have been offered to passengers. Although the needs of upper class travellers have not been overlooked, every effort is being made to add to the amenities to the Class III passengers, which include the provision of an all-Class III night express running between Delhi and Amritsar, as well as better booking sanitary, catering and other arrangements on station premises.

Ministry of Transport Accident Report

London Bridge, Southern Region, British Railways: July 24, 1949

Colonel D. McMullen, Inspecting Officer of Railways, Ministry of Transport, inquired into the accident which occurred at approximately 10.42 a.m. on July 24, 1949, just outside London Bridge Station, when a "C" class 0-6-0 tender engine, running chimney first, passed a colour-light signal at danger and collided almost head-on at a diamond crossing with the 9.48 a.m. electric train, Tattenham Corner to Charing Cross, as it was crossing from the up through to the No. 1 up line. The train was carrying between 80 and 100 passengers, of whom eleven complained of injury or shock and three were taken to hospital. The motorman and the driver and fireman of the engine were also taken to hospital, and the last two were discharged after three days. The passengers and the motorman were not detained.

The engine struck the centre of the driving compartment and was derailed. The driving bogie of the motor coach was displaced and the front end heavily damaged, but there was no arcing or fire, and current was cut off without delay. There was considerable dislocation of traffic, and 44 trains had to be cancelled and the working of 42 others altered. The day was fine and sunny.

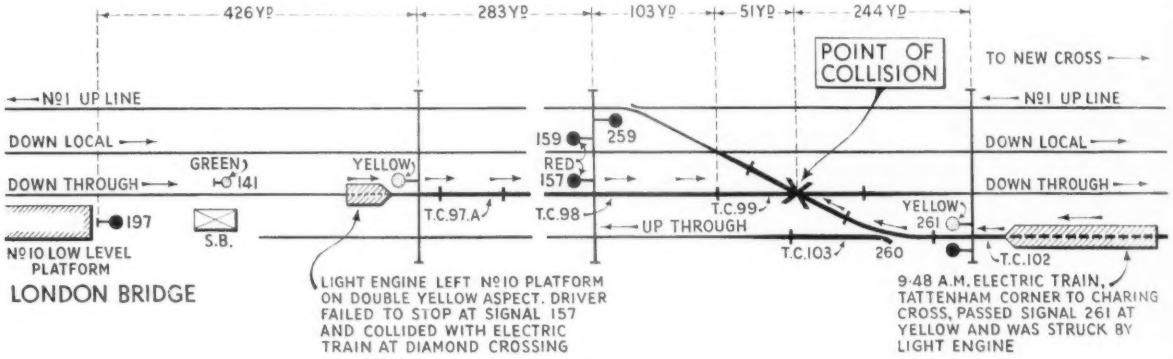


Diagram illustrating circumstances of collision near London Bridge, July 24, 1949

The Layout

The accompanying diagram shows the lines and signals immediately concerned. All lines are completely track circuited and the points and signals electrically operated. The signals in advance of Nos. 157 and 159, which are three-aspect, are automatic, signal 156 is three-aspect and preceded in the locking by ground signal 141, which is two-aspect, red and green. Signal 197 is four-aspect. The view of Nos. 156 and 157 is good. The former can be seen from platform No. 10, from which the engine started, and 157 from a point on the down through line opposite the signal box. The complicated intense traffic necessitates reduced overruns, normally not less than 200 yd., but beyond signal 157 the distance is only 103 yd. The signal aspects are continuously repeated over the corresponding signal levers.

It was a Sunday and the services were being worked normally and on time. The inspector on duty in the box saw the light engine arrive in the platform at 10.33 a.m. and was informed it was to travel to New Cross Gate on the down through. Shortly after, he noticed track 98 indicated as clear, and realised that the engine must have passed signal 157 at danger. At the same time he saw that track 103 was occupied by the Tattenham Corner train, which he knew would pass over crossover 260. He examined the frame and found levers 156, 157 normal and indication lights red, and levers 260, 261 reversed. All down local line levers were normal, and the last train over that line left at 10.35 a.m. from No. 13 platform. Any question regarding preference to either the train or the engine over the diamond crossing would have been referred to him, and there was none. With 260 reversed, 157 was locked normal. Had 157 been reversed first, it could not have been put normal after approach tracks 97A and 98 had been occupied until they had been cleared or a lineman had given a backlock release, which had not been done. This would have held 260 normal. Tests made in his presence after the accident showed everything to be in order.

The signalman at the eastern section of the frame pulled 260 and 261 on seeing track 102 occupied by the electric train. He was not then aware of the light engine movement. He pulled 259 when track 99 became occupied. He first knew that something was wrong when the inspector saw that the engine had passed signal 157.

The other signalman said the Tattenham Corner train was described at 10.39 a.m., and he informed his colleague, who would signal it. Shortly after that, the light engine driver telephoned to say he was for New Cross, and he replied to him, "All right, you will be going down the through," and pulled Nos. 197, 141, 156, but did not touch 157, knowing it would be locked by 260 reversed.

The indications in the frame then were: Above 197, double yellow; above 141, green; above 156, yellow; and above 157, red. He did not speak about the engine to the other signalman or the inspector; there was no necessity. He followed its passage on the diagram and replaced 197, 141, 156. The inspector drew his attention to track 98 having become clear, and he noted that the indication over lever 157 was red, as was that over 159. All down local levers were normal. Had 157 been cleared before 260, 261 had been reversed, the signal would have shown green, and in that event signals 156 and 197 also would have done so. There was a lineman in the box, but he had not been given any possession or removed covers from any locking.

The motorman of the train knew the road well. He found the last automatic signal at yellow and 261 red, but this changed to yellow at about two coach-lengths. He passed at about 15 to 20 m.p.h. Taking the turnout, he looked for signal 259 and saw it change to yellow, and then saw the light engine approaching. He applied the brake fully and released the dead man's handle, but had no time to whistle.

The guard, riding in the rear compartment, was using the periscope. As the train took the turnout he saw the chimney of an engine on the adjacent track and endeavoured to make an emergency brake application, but the motorman had acted.

The driver of the engine was entirely familiar with the route. When he telephoned to the box he was not certain exactly what the signalman replied, but he took it to be somewhat sarcastic and uncivil, and told his fireman about it. Almost immediately after he noticed signal 197 at double yellow and started. Signal 156 showed single yellow. He shut off steam, expecting to find 157 red, but opened the regulator on seeing it also was at yellow. He shut it again before passing that signal at 15 to 20 m.p.h., and almost immediately saw the electric train come across in front. He made a full brake application.

The Over-run Signal

He said he did not observe 157 until he had passed 156. He was sure he did not see 157 change to yellow. At no time did he see that signal at red. He was certain also that, apart from the remarks mentioned, there was no conversation on the footplate. Having seen the aspect of 157, he looked out "unconcernedly" through the spectacle glass and saw the train some distance away and later saw it take the crossover. Even had he seen the headcode he would not have known the train would have to cross to No. 1 up line. Questioned closely, he was adamant that he never saw signal 157 at red. It showed "good clear yellow." Told that this was impossible, he said he would never believe such a statement.

The fireman had not recovered sufficiently to enable him to attend Colonel

McMullen's inquiry, but it was known that he could give no useful information.

Evidence was given by a lineman who was in the box endeavouring unsuccessfully to obtain possession of some points, and the Signal & Telegraph Inspector, who happended to be at London Bridge, covering examination of the frame and mechanical and electrical tests of contacts, cables, locking, and so on, all of which gave satisfactory results. The Inspector could not remember any failure occurring to signal 157, nor had its circuit been disconnected for the past 18 months. The periodical cable tests had been made, the last on March 16, 1949, about which time the frame locking was tested also. He had not known a danger side failure during the last 20 years, for 16 of which he had been in charge at London Bridge.

Inspecting Officer's Conclusion

There is reliable evidence that the interlocking and electrical controls were fully tested and found to be in good working order. The road was set for the Tattenham Corner train and the accident was clearly caused by the engine passing signal 157 at red.

The driver mentioned to the lineman a few minutes after the accident that the signal was at yellow, and Colonel McMullen had to consider whether the signal aspect might have been other than red at any time during the approach of the engine. This could only have arisen had one signalman drawn lever 157, in addition to levers 197, 141, 156 before the other reversed 260. Had this been done at all, the signals mentioned would all have shown green. The driver was as definite that no running signal did so as he was that 157 showed yellow. He was certain that he did not see it at red or change from red to yellow. He agreed that when he saw 156 at yellow, 157 must have been red. Both could be seen from a point opposite the box, and it is difficult to appreciate that a driver could see one without noticing the aspect of the other. The possibility of signal 159 having been taken for 157 does not arise, and the driver stated that he had not done so.

Colonel McMullen is not in doubt that signal 157 was at red during the approach of the engine, and has no alternative but to place full responsibility on the driver for passing it at danger. The nature of his evidence suggested that he was not concentrating his attention on signals. It also seems possible that he was feeling some resentment against the signalman, whom he considered, without apparent justification, had been uncivil over the telephone.

Although the driver denied it, Colonel McMullen would not be surprised if he and the fireman were discussing the matter, and can only conclude that he completely missed signal 157, the one he was so certain was at yellow being in fact the previous one, 156. He is an experienced driver, with 31 years' railway service, 14 driving, and with good sight. There is no question of colour blindness.

No blame attaches to the motorman, who is to be commended on his alertness in stopping in only 40 yd.

Remarks

The over-run beyond signal 157 is only 103 yd., but is not considered a contributory cause, for the light engine driver did not apply his brake until he had passed the signal and seen the train take the crossover. Colonel McMullen has no recommendation to make. The accident was caused by an inexcusable lack of concentration by the driver.

Formation of a Railway Signal Society in Bombay

An Indian Section of the Institution of Railway Signal Engineers was formed on June 8, 1948. Members of the Institution in India, however, are widely separated, and owing to the distances to be travelled attendance at the Bombay meetings was small, and it was only possible to meet twice a year to read papers and discuss signalling topics.

The recent change in the constitution of the Institution means that prospective Associate Members must now pass an examination in railway signalling and in mechanical and electrical engineering. Many signal inspectors and other equivalent staff have not the necessary technical or academical training to enable them to pass such examinations, and there is no scheme as yet to enable prospective candidates to sit for the examination in India, though a scheme is expected to be in operation shortly.

The Indian Section decided, therefore, to form a Railway Signal & Telecommunication Society in Bombay to embrace members of the railway signal departments. If the Bombay society is successful, and there is no reason why it should not be, it is hoped to form other societies in Delhi, Calcutta, Madras, and so on.

At the beginning of January there were 100 prospective members. The inaugural meeting was held on January 17, at which there was a good attendance. Mr. H. C. Towers, Deputy Chief Engineer (Signals), Bombay Baroda & Central India Railway, was elected Chairman until he goes on leave to the U.K. this month; Mr. D. P. Purang was elected Honorary Secretary; and Mr. G. S. Gokhale Honorary Treasurer.

Staff & Labour Matters

Rejection of N.U.R. Wage Claim

Representatives of the Railway Executive and the N.U.R. met on February 27 to discuss the application for a £5 weekly minimum wage for railwaymen. The claim is an outcome of the major application for an all-round increase of 10s. a week which was rejected last year by the Board of Conciliation set up by the Minister of Labour. The revised claim was submitted by the N.U.R. to the Railway Executive on January 24. At the further meeting on February 27, the reply of the Railway Executive was that no increase could be contemplated in the present economic circumstances of the country.

Piecework Rate Dispute

At a meeting of the Railway Shopmen's National Council on February 24, discussion took place on the application to pieceworkers of the arrangements defined in R.S.N.C. Minute 577, and subsequent agreement, regarding piece and basic rates. Shopmen at certain works have expressed dissatisfaction at the implementation of the agreement and at Doncaster Works and elsewhere the men are refusing to do piecework, as recorded in our February 10 issue. After a long discussion the meeting adjourned.

Road Motor Drivers' Claim Rejected

On February 3, Sir John Forster, Chairman of the Railway Staff National Tribunal, published his decision on a claim that the existing special allowance of 9d. a day to drivers of road motor vehicles, other than tractors, when hauling trailers, should be increased. The claim was submitted under the provisions of paragraph 53, Appendix, Part V, of the Machinery of Negotiation for railway staff of February, 1935.

The N.U.R. contended that, since the introduction of the existing allowance in 1930, road traffic has much increased, and consequently the strain on drivers in manœuvring vehicles with trailers in traffic. The pay of motor drivers had improved since the introduction of the allowance.

The Railway Executive maintained that the question whether the existing allowance was adequate should be considered in relation to the pay of other motor drivers. The effect of recent changes was that the relationship of the pay of the driver of a vehicle up to 8 tons with a trailer, and that of a driver of a vehicle of over 8 tons and under 20 tons, had been made more favourable to the former. The Road Haulage Central Wages Board had discontinued making provision for a trailer allowance. The N.U.R. claim specifically excluded tractor drivers and it would be inequitable to increase the rate of pay of the motor driver with trailer while leaving the other unchanged.

Sir John Forster ruled that the claim had not been established.

Irish Transport Bill

The debate on the Irish Transport Bill in the committee stage continued on February 21, when Mr. S. Lemass said that a section of the Bill provided that the amount of new capital which could be invested in the undertaking, without amending legislation, was limited to £7,000,000.

No serious attempt had been made to outline in the Dail the reconstruction plans, including particulars of the capital expenditure considered necessary for C.I.E.; and the effect of that capital expenditure on the revenue of the undertaking; and whether they had any prospect that at some time, revenue would meet expenditure.

Mr. Morrissey, Minister for Industry & Commerce, said that £7,000,000 was now regarded as adequate to the scheme of reorganisation and reconstruction.

On Section 27, dealing with the issue of Transport stock, Mr. Lemass moved an amendment to give the members of the Board as much say as the Minister for Finance in what the terms and conditions under which stock was issued and the interest to be paid would be.

Mr. Morrissey, saying he could not accept the amendment, said the effect of it would be of putting the members of the Board in the position of determining the rates of interest and all other things in connection with the issue of stock. The amendment was withdrawn.

On February 22, strong criticism of the proposal in the Transport Bill to provide compensation for C.I.E. directors was made by Mr. James Larkin and Mr. Morrissey replied that he would leave the matter to the decision of the House.

On a vote, the proposal to compensate the directors of C.I.E. and the Grand Canal Company for loss of office by payment of two years' fees, was rejected by 99 votes to 10.

The Dail accepted an amendment moved by Mr. Morrissey inserting a new Section in the Bill to provide for the appointment of a Transport Tribunal to supervise the decisions of C.I.E. in relation to the alteration of transport services, fares, and charges.

The Bill passed the committee stage and the report stage was fixed for February 28.

Great Northern Railway Company (Ireland)

Lord Glenavy reviews the financial position of the company and its economic importance

The annual meeting of the Great Northern Railway Company (Ireland) was held on February 28. Lord Glenavy, Chairman, referring to the financial position, which we dealt with in an editorial article in our February 17 issue, recalled that last summer the stockholders had been advised that there was a loss on working for the first half-year of some £235,000.

The accounts showed that loss to have been reduced by the end of the year to some £91,000. Receipts were always better in the second half of the year and so some reduction was not unexpected. The actual amount of the reduction, however, reflected chiefly the miserable expedients into which they had been forced to conserve cash.

Nobody could or did blame the company for the tragedy that initiative no longer availed to save men from losing their livelihood, passengers and traders from being deprived of services, money from being unnecessarily drained away, renewals and development from being arrested.

An Enviable Record

These were the circumstances in which it was suggested that the board was raising unwarranted alarm. Few enterprises in Ireland compared with theirs in scale or character or reputation. Capital exceeded £11¼ million. Some might feel no concern that millions of capital should go without reward while its product was relied on by the public for indispensable daily duties, some might think complacently of its nearing the down-and-out stage, some might wish for that stage to arrive with the notion of then acquiring the company for a nominal sum. Other views, not unconcerned with the public interest, might be held, however, and the board made no apology for holding them.

At their last annual meeting no one supposed that twelve months could have passed without the appearance of a definite joint plan for the future. Questions such as an arbitrator had been able to settle within a period of days in the case of the Northern Counties Railway remained unsettled even after a year. Statements had got into circulation that a proposal had been made and been rejected. There was no foundation for them.

One public purpose the delay had served, however, which was that the results of another year in the other undertakings were available, and the true economic factors of their position had been brought into the daylight. The direction now taken by policy in transport, with all its essential elements known, might be found to have been a turning point for administrative sagacity. Uncertainty and pessimism surrounded the prospects for public transport. Neither need cloud the prospects for the Great Northern Company, and to come to that conclusion practical men, concerned that the soundest technical arrangements be adopted, had only to study the potentialities of the position in the light of the facts.

Viewing these facts in relation to those of the other undertakings the total situation presented a travesty of economic commonsense. There were three principal undertakings. Two of them, with unrestricted powers of co-ordination by road and rail, were working at a loss. They had had to be buoyed up, for some time, with large subventions from public funds, loans, grants, and remissions of capital liability. The third, their company, worked at a profit where its powers were the same as the others. Losses were suffered only in the area where those powers were taken from it on terms amounting to a trust which, so far from being fulfilled, was in practice perverted. Their company had to cope with handicaps which the others had no occasion to face, such as the constriction of a Customs border around its middle, but all the same, the G.N.R. was the one which had kept itself afloat unaided long after the others had had to be salvaged.

To what policy would non-partisan observers say that such a situation plainly pointed. Surely to the one they had consistently emphasised, namely, that the company which had supported itself while the others had grounded, should be fostered with boldness and sympathy. Its powers on the road would be restored to it in reparation for the disregarded obligations attached to their removal so that it could operate the co-ordinated services in its territory which it had shown itself the only one able to conduct at a profit.

Public transport in Ireland would then have the incentives, the community the standards of comparison, afforded by variety in structure and by scope for emulation. Taxpayers, Treasuries, staff, passengers, and traders would have no ground for new anxieties. There would be no complications of a political kind. One stipulation would be self-evident, namely, that with stockholders instead of taxpayers taking the risks, social policy should not by haphazard applications prevent the management from living within its means.

An Alternative Policy

All that had been indicated was that the G.N.R. company, which only needed the gesture of reparation to be fully self-supporting, was to be submerged into organisations of a socialised type in which even their patrons professed no more than a diluted confidence. Would not wisdom examine plans for sustaining rather than submerging the proven concern? Considering the intricacies to which the latter course must give rise its attraction was far from evident unless it might be the buoying up of the other concerns with ready made profit earning capacity. The choice was between a policy which in none of its adaptations had anywhere produced an economic transport system and the just fostering of the most economic among existing organisations.

Should the choice be socialisation their interests had to be acquired and there were certain cardinal factors to be borne in mind. They were the providers of a public service which in point of all that made a service valuable was one of the most valuable in Ireland. No creation of Irish private enterprise had had better informed witness to its efficiency, none had had higher standards of upkeep, none had had a better record with its customers. No private investors had ploughed back into the business, year after year in hard times, a larger proportion of their earnings.

Taking only the four post-war years, amounts allocated out of earnings to capital development and renewals exceeded £1½ million, while maintenance absorbed another £2¾ million. The company thus presented an outstanding test of the degree in which recognition was to be relied on for real accomplishment by that private enterprise to which the country was being constantly exhorted.

Break-up Value

Those with whom legislative measures rested for the future of the company need not personally have the detailed knowledge required for a just assessment of its merits. Wisely, therefore, the assessment was referred to experts who began by determining a break-up value. Their basis adopted, arbitrarily, low pricing of the rolling stock, but a foundation at least on which the public could build a judgment had been recorded. Break-up value had this importance, that it would accrue in full to any acquiring State organisation, but it must be less than the true assessment for an undertaking which earned profits and was blameless for losses imposed on it. Experience had established a 60 to 40 ratio between their business in the north and in the south.

In the south the average net income for the three years ended 1947 was £343,000; therefore, with the powers of which the company was deprived in the north, the comparative net income there should have been some £514,000 a year. Total net income would thus have been an average of £857,000. The year 1947 was the last appropriate year to take, because from January 1, at the latest, others had public funds to back any losses.

There must be few companies in which the market prices of its stocks were so irrelevant to actual values. It was only with profits producing dividends that the market was concerned. No better proof could be wanted of the irrelevance of market prices than the amount by which any valuation based on them would fall short even of break-up value. Moreover, the effect of such a valuation would be to rivet on the injured party damages for the failure of others to observe the conditions which governed the transfer of their road services.

Past experience would have made the stockholders wiser than to speculate on the outcome. It might be that the uneasy vistas before public transport would gain the case a hearing. Their allies were those who could appreciate achievement such as their officers and staff and the stockholders had built into the company. It was against conscience for the integrated product of those qualities to be denied either a fair field for its operations, or, should the fashion of the day demand its submergence, then honourable terms of release.

The Governments had data for an approach to such terms in the replacement cost of the undertaking estimated some two years ago when prices were lower; in a break-up value to which at least £500,000 must be added in the barest justice to the rolling stock; in the amount of capital expended; and in the comparative earning capacity of which the scope had now been indicated.

The report and accounts were adopted.

New Buffet and Restaurant Cars, G.N.R.(I.)

Inspection at Dublin and Belfast of coaches to run in Dublin—Belfast services

At Amiens Street Station, Dublin, on the occasion of the inspection on February 15 of the new buffet and restaurant cars for the "Enterprise" and ordinary Dublin-Belfast main-line services of the Great Northern Railway (Ireland), to which brief reference was made in our last week's issue, the Chairman, Lord Glenavy, said that the coaches were an achievement in the production of high-class railway rolling stock.

The design of the coaches had been approved in 1948, and construction was begun at the Dundalk Works in 1949. They showed what the company could achieve when it was allowed the financial stability necessary to maintain its high standards; that stability was now endangered, so that the invention and skill of the staff could not be fully used until wiser conceptions of public interest prevailed.

Those present at the inspection in Dublin on February 15 included:—

Lord Glenavy, Chairman, G.N.R.(I.); Mr. T. C. Courtney, Chairman, Coras Iompair Eireann; Mr. J. B. Stephens and Sir George Clark, Deputy-Chairmen, and Messrs. Raymond A. Burke, James M. Carroll, and R. Stanley Stokes, Directors, G.N.R.(I.); Mr. G. B. Howden, General Manager, G.N.R.(I.); Messrs. F. Lemass, General Manager, and D. Stewart, Traffic Manager, C.I.E.; and the following officers of the G.N.R.(I.): Messrs. H. McIntosh, Mechanical Engineer; H. S. Knott, Traffic Manager; C. Johnston, Hotels & Catering Manager; C. H. Slater, Civil Engineer; P. H. Patterson, Accountant; F. C. Wallace, Secretary; P. K. M. Carey, Solicitor; J. S. McCormick, Stores Superintendent; J. F. McCormick, Managerial Executive Officer; T. J. Carton, District Traffic Superintendent; and A. M. Beaton, Advertising & Publicity Superintendent.

The next day, February 16, the cars were inspected at Great Victoria Street Station, Belfast, when, on behalf of the guests, Mr. J. Nelson McMillen, Chairman of the Ulster Tourist Board, thanked the directors of the G.N.R.(I.) for their hospitality, saying that the new cars would help the tourist industry; he congratulated not only the directors, but the workpeople concerned. Replying, Sir George Clark said that it was a pleasure to see what had been accomplished by private enterprise.

Among the G.N.R.(I.) officials and guests present on February 16 were:—

Sir George Clark, Deputy-Chairman, G.N.R.(I.); Messrs. J. Nelson McMillen, Chairman, and R. J. Frizzell, General Manager, Ulster Tourist Board; W. Sweeney, Chairman, Ulster Tourist Development Association; Mr. G. B. Howden, General Manager, G.N.R.(I.); Messrs. J. Hutton, Chief Traffic Manager, and J. Courtney, Chief Engineer, Ulster Transport Authority; R. H. Murphy, Area Superintendent, British European Airways; and officers of the G.N.R.(I.) as follow: Messrs. H. McIntosh, Mechanical Engineer; H. S. Knott, Traffic Manager; C. Johnston, Hotels & Catering Manager; A. M. Beaton, Advertising & Publicity Superintendent; J. F. Atkinson, Commercial Superintendent; J. C. Bailie, Operating Superintendent; and H. Evans, Staff Superintendent.

Directors and officers of G.N.R. (I) and guests in the new restaurant car on February 15

Left to right: Mr. F. Lemass, Sir George Clark, Mr. H. McIntosh, Mr. J. B. Stephens, Lord Glenavy, Mr. G. B. Howden, and Mr. T. C. Courtney

Photo

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BRITISH ROAD SERVICES MAGAZINE.—The first issue of a monthly staff magazine, dated March, 1950, has been issued by the Road Haulage Executive, 222, Marylebone Road, London, N.W.1; the price of a copy is 3d. In a foreword Major-General G. N. Russell, Chairman, Road Haulage Executive, expresses his satisfaction that it has been possible to produce the magazine at such a comparatively early date in the Executive's history and points out that it is intended not only as a magazine for the staff, but one to which they will contribute extensively. The magazine is an attractive production and includes both instructive and general news items. Among the contents of the first number is an illustrated article on the carriage and delivery of a special 115-ton load over a distance of 250 miles, when a giant refinery column had to be moved from Lordon to Stanlaw. The first of a series entitled "All About Ourselves" deals with the growth and organisation of the Road Haulage Executive, and there is a technical section, which this month deals with the internal-combustion engine. Items of staff news from the various Divisions of the Executive take up six pages of the total 24.

Notes and News

Institute of Transport Annual Dinner.—The annual dinner of the Institute of Transport will be held at the Connaught Rooms, Great Queen Street, London, W.C.2, on Friday, March 17.

Carriage & Wagon Superintendent Required.—A vacancy exists for a carriage & wagon superintendent, between 35 and 40 years of age, on the Gold Coast Railways. See Official Notices on page 263.

Assistant Accountant Required.—An assistant accountant, between 25 and 35 years of age, is required by the railway department of the Federation of Malaya for one tour of three years, with prospect of permanency. See Official Notices on page 263.

Agreed Charges.—Applications for the approved of 96 further agreed charges under the provisions of section 37 of the Road & Rail Traffic Act, 1933, have been lodged with the Transport Tribunal. Notices of objection must be lodged on or before March 14 next.

Location Engineer Required.—A location engineer is required by the Nigerian Government Railway for one tour of 18 to 24 months in the first instance. Candidates must be chartered civil engineers or surveyors, with railway survey experience. See Official Notices on page 263.

British Railways, Western Region, London Lecture & Debating Society.—At a meeting of British Railways, Western Region, London Lecture & Debating Society to be held in the Clerks' Dining Club, Bishop's Bridge Road, Paddington, on March 16, at 5.45 p.m., Mr. P. Robbins, Assistant Chief Chemist, Swindon, will read a paper on "The Work of the Railway Chemist."

Civil Engineer Required.—A vacancy exists on the Rhodesia Railways for a fully qualified civil engineer, between the ages of 40 and 45 years, for appointment in the first instance as assistant to the bridge engineer, with a view to assuming the post of bridge engineer upon the retirement of the present incumbent at the end of 1951. See Official Notices on page 263.

British Railways Enquiry Office at "Ideal Home" Exhibition.—There will be a British Railways enquiry office on the ground floor in the National Hall at Olympia during the period of the "Ideal Home" exhibition from March 7 to April 1. The office will consist of the mobile unit which was constructed last year and used as a travelling booking-office for the sale of excursion tickets at South Coast resorts. At Olympia it will be staffed by railway representatives who will be prepared to answer enquiries on all aspects of passenger and freight transport by rail; British Railways Holiday Guides will be on sale.

Institute of Transport, Southern Section, Annual Luncheon.—The annual luncheon of the Southern Section of the Institute of Transport took place on February 18 at the B.O.A.C. Marine Airport, Southampton Docks. The President, Brigadier-General Sir H. Osborne Mance, responded to the toast of "The Institute and the Southern Section," proposed by Sir Gilmour Jenkins, Secretary, Ministry of Transport, and was supported by Alderman E. Burrow, Chairman of the Southern Section. "The Town and Corporation of Southampton" was proposed by Mr. C. N. Anderson, and the Mayor of Southampton, Alderman P. W. Blanchard, responded. The toast "Our Guests" was proposed by Mr. A. J. Wright, Past Chairman of the Section, and response was made by Mr. Hugh F. Hawkins and Mr. G. S. Szlumper, Past President of the Institute.

Electrification in Queensland Approved.—An agency message from Brisbane states that the Queensland Government has approved the electrification of the Brisbane suburban railways at a cost of £A8,853,000. Tenders will be called within six months for rolling stock, power supply equipment, and other materials. The Government hopes to complete the electrification in eight or nine years.

Derailment Near Darlington.—Traffic on the main line between Kings Cross and Edinburgh was interrupted on February 23, when 37 wagons of a fast freight train were derailed some 1¼ miles north of Darlington, at Springfield Box, North Eastern Region. Wreckage was strewn over both the up and down lines, and traffic had to be diverted *via* Bishop Auckland or Stockton. No one was hurt.

Joint Debate at London School of Economics.—On Wednesday, February 22, there was a joint debate between the Railway Students' Association and British Railways, Western Region, London Lecture & Debating Society, at the London School of Economics & Political Science. The subject "That British Railways Would Benefit by the General Adoption of a Unified Class of Passenger Travel." was proposed by Messrs. C. E. Wild and N. R. Geiger and opposed by Messrs. T. J. Morris and J. Kent. In conclusion, Mr. H. E. Hedges, General Assistant to the Chief Regional Officer, Western Region, proposed a vote of thanks to Mr. R. J. Eaton, Chairman of the meeting.

Jubilee Family Dinner of Railway Convalescent Homes.—To celebrate the 50th anniversary of the foundation of the Railway Convalescent Homes, a family dinner and dance was held at the Coventry Street Corner House, London, last Saturday, with Mr. R. O. Griffiths, Chairman of the Trustees, in the chair. There were no formal speeches, but during the evening the Chairman presented tokens of appreciation to those long-service members of the general committee who have retired since 1939 and were present at that function. In all, presentations are being made to 17 members, and most of them were present. The Chairman remarked on the fact that their total length of service on the general committee was 407 years.

Obligatory Rail Travel.—The British Transport Commission has given an assurance that it is not its policy to oblige the public to use the rail services without regard for alternative facilities whether or not they are operated by the Commission. It is contained in correspondence issued on February 25 by the British Road Federation Limited. The Federation had raised the matter following reports of an application by Barton Transport Limited, at East Midland Traffic Court in Nottingham, to carry passengers by road from Melton Mowbray to Yarmouth. The Commission, in its letter to the Federation, stated: "At no time did the railways' counsel state that the contention of the British Transport Commission was that the public should be forced to use the trains, and that the road services should be correspondingly constricted. The various transport services for which the Commission is responsible are subject to competition, and in any event the freedom of the public and traders to use those forms of transport best suited to their needs is safeguarded under the Act. Freedom of choice, however, is not to be confused with wasteful duplication of parallel services."

Vans for Fruit Traffic.—As a result of experience with six experimental vehicles for fruit and vegetable traffic, the L.M.S.R. decided in 1947 to undertake the construction of 200 new ventilated vans as soon as conditions would permit. The vans, which were described in our July 4, 1947, issue, are now being built at Wolverton Works, London Midland Region, at the rate of 20 a week.

Canadian Pacific Dividend.—At a meeting of the directors of the C.P.R. on February 13, a final dividend of 3 per cent, on the ordinary capital stock in respect of 1949 was declared payable in Canadian funds on March 31. The directors point out that, while there has been a slight increase in net earnings from rail operations in 1949, these are still insufficient to pay a dividend. The dividend paid is attributable solely to income from other sources.

Human Relations in Transport.—The first of the Institute of Traffic Administration regional conferences on "Human Relations in Transport" will be held in Manchester on March 14, at 7.15 p.m., at the Grand Hotel. The conference is being arranged by the Institute's Manchester Centre, and speakers will include Mr. Reginald Hewitt, Mr. S. Reid, District Staff & Welfare Officer, Road Haulage Executive, and representatives of the operatives.

Docks Executive Visit to Bristol.—Sir Reginald Hill, Chairman, and Sir Robert Letch, Mr. George Cadbury, Mr. John Donovan, and Sir Hector McNeill, Members of the Docks & Inland Waterways Executive, continued their series of visits to port areas in accordance with Section 66 of the Transport Act, 1947, when on March 2 they commenced a visit to the port of Bristol. Among the parties the Executive has arranged to meet during the course of its visit are:—Port of Bristol Authority; shipowners; Bristol Chamber of Commerce and trading interests; and trade unions.

British Railways, Southern Region, Lecture & Debating Society.—Two exhibitions of Swiss films are being given at the Chapter House, St. Thomas' Street, London Bridge, on March 15 and 29, for members of British Railways, Southern Region, Lecture & Debating Society. The meetings are being held at 5.45 p.m. and each display will be preceded by a brief outline of the films by Mr. H. O. Ernst, London Manager, Swiss National Tourist Office. On March 15 the display will include: "Travelling from Yesterday to Today"; "Vital Arteries to Economy"; "Gotthard"; "Winter Sports." On March 29 the following films will be shown: "In the Service of the People"; "Centenary Film"; "Do You Know?"; "Holiday in Switzerland."

Debating Society Continental Tour.—British Railways, Southern Region, Lecture & Debating Society, of which Mr. C. P. Hopkins, Chief Regional Officer, Southern Region, has recently accepted the Presidency, is arranging a Continental tour during June. The party will leave London on June 12 and arrrive back again on the evening of June 23, though the programme has been arranged so that those

LEGAL AND OFFICIAL NOTICES

In the Court of the Transport Tribunal

TRANSPORT ACT, 1947—PART V

DRAFT LONDON AREA (INTERIM) PASSENGER CHARGES SCHEME

THE British Transport Commission hereby give notice that they have lodged with the Transport Tribunal an Application (1950, No. 225) to confirm the "Draft London Area (Interim) Passenger Charges Scheme" set out in the Schedule thereto, being a Draft Charges Scheme submitted by the Commission to the Tribunal pursuant to Section 76 of the Transport Act, 1947, and to specify the date upon which such Scheme as confirmed by the Transport Tribunal, shall come into force, and the manner in which such Scheme shall be published.

The Application and Draft Scheme may be inspected at the Office of the Registrar of the Court, Wellington House, 125 to 130, Strand, London, W.C.2, during office hours.

Copies can be obtained from the Central Office, British Transport Commission, 55, Broadway, London, S.W.1, price 5s. post free.

NOTICE IS FURTHER GIVEN that by an Order of the Registrar of the Court dated the 24th day of February, 1950, it was ordered that any body claiming to have any Objection or other Representation with respect to the said Application heard by the Tribunal, pursuant to sub-sections 2 (*a*) and (*b*) and (3) of section seventy-eight of the said Act, must lodge with the Registrar at his said office on or before the 28th March, 1950, a written notice in the prescribed form (Form No. 5 in the First Schedule to the Transport Tribunal Rules, 1949, Statutory Instrument No. 989), setting out the nature of the claim, and the Objection or other Representation which is to be heard, and particulars of any modifications or variations which are proposed to be made in the Scheme.

Every such Notice must state the name and address of the body claiming to be heard. It must be on foolscap size paper, single sheet, and may in the case of a body, association or authority, be signed by the chairman, president, managing director, general manager or secretary of the body, association or authority, or by any person authorised under the seal of a body corporate to sign on its behalf or by any person authorised to represent a party under Rule 51 (3) of the said Rules.

In the case of a representative body claiming to be heard under sub-section (2) (*a*) aforesaid the notice shall state particulars of the class represented and the nature of its authority.

In the case of a body constituted for carrying on any industry or undertaking under national ownership or control, and claiming to be heard under sub-section (2) (*b*) aforesaid, the notice shall state particulars of the industry or undertaking nationally owned or controlled, and the use made of the services to which the Scheme relates.

In the case of a representative body claiming to be heard under the provisions of sub-section (3) aforesaid, the notice shall state particulars of the class represented, the nature of its authority and the comparable services provided by the class.

Each original Notice must be stamped with an adhesive fee stamp for 2s. 6d. (which can be purchased at the office of the Tribunal only) or, if sent by post, must be accompanied by a postal order for 2s. 6d., payable to the Transport Tribunal, when a stamp will be affixed at the office.

A signed and sealed copy of every such Notice shall be served on the Chief Solicitor to the British Transport Commission, 4, Cowley Street, Westminster, London, S.W.1, on or before the 29th March, 1950.

Six additional copies of every Notice must be lodged with the original at the office of the Registrar.

MILES BEEVOR,
Chief Secretary, British
Transport Commission

28th February, 1950

Crown Agents for the Colonies

ASSISTANT ACCOUNTANT required by the Railway Department of the Federation of Malaya for one tour of three years with prospect of permanency. Commencing salary, including expatriation pay according to qualifications and experience in the scale $510 a month rising to $770 a month plus cost-of-living allowance for single man $150 a month and for married men up to $310 a month. Malayan dollar = 2s. 4d. Free passages. Liberal leave on full salary. Candidates between 25 and 35 years of age must have had seven years training and practical experience in the Accounts Department of a Railway and be fully conversant with Goods and Coaching Audit work. Must be familiar with preparation of Revenue and Expenditure Accounts and Returns, preparation and use of statistics. Should have knowledge of mechanical accounting systems, control and stock recording of stores costing as applied to Mechanical Engineering Workshops. Apply at once by letter, stating age, whether married or single, and full particulars of qualifications and experience, and mentioning this paper, to the CROWN AGENTS FOR THE COLONIES, 4, Millbank, London, S.W.1, quoting M/N/23277/3E on both letter and envelope. The Crown Agents cannot undertake to acknowledge all applications and will communicate only with applicants selected for further consideration.

His Majesty's Colonial Service

GOLD COAST

A VACANCY exists for a Carriage and Wagon Superintendent on the Gold Coast Railways. The post is permanent and pensionable. The salary scale is £720 (for three years) to £1,300, including expatriation pay. The point of entry will depend on war service, qualifications and experience. Candidates must be between 35 and 40 years of age and be Corporate Members of the Institution of Mechanical Engineers or hold equivalent qualifications exempting from Parts "A" and "B" of the examination for Associate Membership. They must also be fully experienced in design, maintenance, building and running of carriage and wagon rolling stock and should be capable of organising the efficient running of the Carriage and Wagon Department of the Gold Coast Railways. Partly furnished quarters are provided at a rent of £75 or £90 per annum according to salary. Free passages are provided for the officer and wife, if married, on first appointment and on leave. Income tax is at local rates which are very much lower than those in the United Kingdom. The tour of service is from 12 to 24 months. Leave on full salary is granted after normal tours of 18 months at the rate of seven days for each completed month of resident service. Candidates should write forthwith for a form of application and further particulars to THE DIRECTOR OF RECRUITMENT (COLONIAL SERVICE), Sanctuary Buildings, Great Smith Street, S.W.1, quoting reference number 27333/23.

WALL Planer, 20 ft. × 12 ft., motorised, by Hulse & Co., Manchester. Also 21-ft. Facing and Boring Lathe, motorised, with 10-ft. chuck. Cheap for quick sale as space urgently required.—Box 639, *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

BRITISH WORK ON PERSIAN RAILWAYS. The achievements and difficulties of the R Es. during the 15 months in which they laid the foundation for effective aid to Russia. Reprinted from *The Railway Gazette*, February 2 and 16, 1945. Price 1s. Post free 1s. 2d. *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

Crown Agents for the Colonies

LOCATION ENGINEER required by the Nigerian Government Railway for one tour of 18 to 24 months in the first instance. Salary, including expatriation pay, £1,260 a year. Outfit allowance £60. Free passages and liberal leave on full salary. Candidates must be Chartered Civil Engineers or Surveyors, with railway survey experience, capable of carrying out field survey work and preparing final location plans for a railway extension, under the direction of a Senior Location Engineer. Apply at once by letter, stating age, whether married or single, and full particulars of qualifications and experience, and mentioning this paper, to the CROWN AGENTS FOR THE COLONIES, 4, Millbank, London, S.W.1, quoting M/N/2523/3A on both letter and envelope. The Crown Agents cannot undertake to acknowledge all applications and will communicate only with applicants selected for further consideration.

Rhodesia Railways

A VACANCY exists for a fully qualified Civil Engineer, preferably between the ages 40 to 45 years, for appointment in the first instance as Assistant to the Bridge Engineer, with a view to assuming the post of Bridge Engineer upon retiral of the present incumbent at the end of 1951. The commencing salary within the age group mentioned would not be less than £1,056 per annum (in addition to which a variable cost-of-living allowance, at present fixed at 7 per cent. is paid). The post of Bridge Engineer carries the salary scale £1,240 by £50 to £1,440 by £30 to £1,470 by £50 to £1,520 maximum. Only those with extensive knowledge of bridge design, fabrication and field work will be considered, and Corporate Membership of the Institution of Civil Engineers or equivalent is essential. The successful applicant would have his headquarters at Bulawayo and will be expected to provide his own accommodation. Two recent testimonials will be required and the earliest date of taking up duty should be stated. The Administration's medical examination must be passed, and if under 45 years of age, the person appointed will be required to join the Contributory Pension Fund. Further particulars may be obtained from the LONDON AGENT, RHODESIA RAILWAYS, 11, Old Jewry, London, E.C.2.

REPRINTS.—The following interesting articles have been reprinted in pamphlet form, and are on sale at this office: The Railway Executive Committee and its Headquarters in Wartime—5s. The Work of the Railway Clearing House, 1842-1942.—2s. 6d. L.M.S.R. Locomotive Casualty Report System—1s. Coming of Age of Railway Grouping: G.W.R., L.M.S.R., L.N.E.R., S.R.—2s. 6d. The "Paget" Locomotive—2s. British-Built Austerity 2-10-0 Locomotive—2s. The Coronation Scot—With Folding Plate—3s. Diesel Locomotive for Industrial Shunting—2s. L.M.S.R. General Utility Locomotives—1s. Station Design—1s. Sectional Perspective View of Locomotive Front End with Folding Plate—2s. 6d. The Locomotive Carriage & Wagon Workshops of the Nigerian Railway—1s 6d. The Tyneside Electrified Lines of the L.N.E.R.—1s. New Montreal Central Station. Canadian National Railways—5s. The Railway System of Jamaica—1s. British Work on Persian Railways—1s. If sent by post 2d. extra. *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

None of the vacancies on this page relates to a man between the ages of 18 and 50, inclusive, or a woman between the ages of 18 and 40, inclusive, unless he, or she, is excepted from the provisions of the Control of Engagement Order, 1947, or the vacancy is for employment excepted from the provisions of that Order.

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who wish to do so may attend for the first or second half of the tour only. The tour will cover some 2,400 miles, with brief visits to Switzerland and Italy, as well as halts at towns and cities in France. Among the railway installations it is intended to visit are S.N.C.F. electrification works at Dijon, the Swiss Federal Railways hydro-electric power stations at Vernayez and Barberine, and the international station at Ventimiglia.

London Transport Poster Paintings Exhibited in Glasgow.—An exhibition of paintings for London Transport posters was opened at the School of Art, Renfrew Street, Glasgow, on February 27. The display will be open until March 18, at the following hours: 9.30 a.m. to 5 p.m., Mondays to Fridays; 9.30 a.m. to 12 noon, Saturdays. The posters, 50 in all, cover some 40 years of London life and are a selection from the London Transport "Art for All" exhibition which was visited by nearly 100,000 people at the Victoria & Albert Museum last summer. Each picture is accompanied by the printed poster showing how it was used and how the painting became a poster. The arrangements for showing the paintings to people outside London have been made by the Arts Council of Great Britain, and it is intended that the exhibition subsequently will visit other towns.

Metropolitan Railway Country Estates Limited.—Profits for the year ended October 31, 1949, of Metropolitan Railway Country Estates Limited were £98,006 before provision for tax and including profits of subsidiaries, compared with £46,625 for the previous year. A dividend was recommended of 10 per cent., less tax, against 8 per cent. last year and 6 per cent. for 1947-48, with £89,400 carried forward, an increase of £22,029 on the year. The Chairman, Sir Bernard Docker, commented on the uncertain position as to depreciation on building land arising from the Town & Country Planning Act; there could be no certainty until the scheme for payment of the global fund reached its final form, and they had received any cash to which they might be entitled. Governmental restrictions deprived them of the opportunity of using their capital and experience profitably; but they were watching for any chance to return to their building estate development business. The annual general meeting was held on February 24.

Traders' Traffic Conference.—The Spring meeting of the Traders' Traffic Conference will take place at Hull on May 9 and 10. The programme for May 9 includes a river trip down the Humber as the guests of the Docks & Inland Waterways Executive, lunch at the Royal Station Hotel as guests of British Railways and the Docks & Inland Waterways Executive, and afternoon visits to the marshalling yards at Hessle, or the automatic signalling system at Hull, Paragon. In the evening there will be the annual dinner

of the Conference at which the Lord Mayor and Sheriff of Hull will be present, among other distinguished guests. On May 10 there will be the usual meeting of the Conference in the morning, followed by lunch as guests of Ellerman's Wilson Line Limited on board one of its vessels, and in the afternoon it is proposed to visit the King George and Alexandria Docks.

Forthcoming Meetings

March 3 (*Fri.*).—Institution of Railway Signal Engineers, at the London Transport Executive Signal School, Earls Court Station, S.W.5, at 6.15 p.m. "Single Line Control," by Mr. D. C. Doswell.

March 3 (*Fri.*).—Railway Club, 57, Fetter Lane, London, E.C.4, at 7 p.m. "The Metropolitan District Railway," by Mr. H. W. Bardsley.

March 3 (*Fri.*).—Belfast Association of Engineers, annual dinner and dance, at the Grand Central Hotel, Belfast, at 7.30 for 8 p.m.

March 3 (*Fri.*).—Scottish Society of Students of the Locomotive, at the Boardroom, Scottish Region Headquarters, 302, Buchanan Street, Glasgow, at 7.30 p.m. "The Art of Engine Driving," by Mr. O. S. Nock.

March 5 (*Sun.*).—Stephenson Locomotive Society, at 302, Buchanan Street, Glasgow, at 2.30 p.m. "L.M.S. Locomotives, 1923-47," by Mr. O. S. Nock.

March 6 (*Mon.*).—Society of Engineers, in the Apartments of the Geological Society, Burlington, House, London, W., at 5 for 5.30 p.m. "Oxygen and Other Gases and their Applications to Industry," by Mr. R. E. Doré.

March 7 (*Tue.*).—Institution of Civil Engineers, Great George Street, Westminster, London, S.W.1, at 5.30 p.m. "Mechanical Handling of Parcels and Mails," by Messrs. J. H. Mahy and J. V. Franklin.

March 7 (*Tue.*).—Federation of Railway Lecture & Debating Societies (North Eastern Region), at the Railway Institute, York. "The Port of Liverpool," by Mr. F. H. Cave, Deputy General Manager, Mersey Docks & Harbour Board.

March 8 (*Wed.*).—Royal Society of Arts, John Adam Street, Adelphi, London, W.C.2, at 2.30 p.m. Trueman Wood Lecture: "The Industrial Applications of Atomic Energy," by Mr. M. L. Oliphant.

March 8 (*Wed.*).—Railway Students' Association, London School of Economics & Political Science, Houghton Street, London, W.C.2, at 6 p.m. "Central and Regional Organisation of Transport," by Mr. M. A. Cameron, Principal Traffic Officer, British Transport Commission.

March 8 (*Wed.*).—Irish Railway Record Society. "Dublin & Wicklow Railway," by Mr. Kevin A. Murray.

March 9 (*Thu.*).—Institution of Electrical Engineers, Savoy Place, London, W.C.2, at 5.30 p.m. "The Application of Electric Discharge Lamps for Daylight Signalling," by Messrs. H. K. Bourne and E. J. Beeson.

March 10 (*Fri.*).—Institution of Mechanical Engineers, Storey's Gate, London, S.W.1, at 5.30 p.m. Applied Mechanics Group and Automobile Division: "Gear-tooth Stresses at High Speed," by Mr. W. A. Tuplin.

Railway Stock Market

The prevailing view in the City is that the election stalemate means a period of uncertainty for stock markets, because many questions have merely been postponed till the next election, expected later this year. Meanwhile, the Government cannot claim any mandate to carry through its nationalisation programme; therefore industrial assurance, cement, sugar, chemicals and iron and steel have been temporarily reprieved.

Shares of companies in the industries threatened with nationalisation have generally rallied this week, though gains on balance were mostly small. An exception to this trend has been iron and steels, which mostly declined further from the take-over levels already fixed in the event of nationalisation. Nevertheless, this week's movements in iron and steel shares must be considered in relation to the considerable degree of speculation in them immediately before the election result; and also to the selling by those who had expected a definite decision on nationalisation. In most cases, iron and steel shares offer quite attractive yields, which will no doubt bring in buyers in due course.

British Funds, after firming up, have receded, partly due to City fears that foreign holders might decide to sell because of talk of a period of political uncertainty in Britain. It is generally agreed however that these fears are exaggerated. There has in fact been very little selling and the lower prices are due mainly to falling off in demand, buyers in all sections showing caution because of the difficulty of assessing the outlook. As expected, nationalisation stocks have continued to move with British Funds, and Transport 3 per cent. (1978-88) came back to 88¼ with the general trend.

There has been a tendency, owing to the prospect of further political uncertainty at home, to give more attention to overseas securities. Kaffir and other gold shares have been particularly favoured; but in the City it is suggested that there might be a revival in due course in foreign rails.

Leopeldina, La Guaira, Bolivar and Great Western of Brazil stocks in nearly all cases still have current market prices well below their probable pay-out terms; and eventually there may be substantial appreciation above current levels. It may of course be a long while before take-over deals are finally ratified, and the stocks of all these companies are not without speculative risk. When buyers return, however, prices may move up quickly. Leopoldina ordinary this week have changed hands around 9⅛, the preference eased to 26, the 4 per cent. debentures to 91¼ and 6½ per cent. debentures to 126. Leopoldina Terminal 5 per cent. debentures were easier at 95½, with the ordinary units at 2s. 7½d.

Manila "A" debentures were 80, and the preference shares better at 8s. 3d. San Paulo 10s. units have been dealt in around 13s. 9d. Antofagasta ordinary was 7⅞ and the preference stock 46.

United of Havana stocks continued to show moderate fluctuations, awaiting further news from Cuba; the 1906 debentures eased to 25¼. White Pass Yukon 6 per cent. debentures remained an active feature with business up to 72. Elsewhere, Canadian Pacifics at 28¼ eased on a little profit-taking.

Road transport and bus companies', like iron and steel shares, moved lower, reflecting a little selling, now that the decision on nationalisation is likely to be postponed until the verdict of the next general election. West Riding fell 3s. to 66s., Southdown eased to 123s. 9d. and Lancashire Transport to 82s. B.E.T. deferred stock, exceptionally, rallied to £500.

In iron and steels, United Steel fell back to 26s. 9d., Stewarts and Lloyds to 53s. 9d., Dorman Long to 31s. 3d., South Durhams to 31s. 6d., while Firth Brown were 1s. 3d. down at 71s. 3d. and Hadfields back to 27s. 6d. As already mentioned, iron and steels now offer quite attractive yields and it is expected that this will bring in buyers in due course.

Locomotive builders' and engineers' shares generally have been quite well maintained, though in many cases it seems that business has been insufficient to test prices this week. Beyer Peacock were 19s. 6d., Vulcan Foundry 18s. 3d., North British Locomotive 19s. 3d., Gloucester Wagon 47s. 7d., and Wagon Repairs slightly easier at 16s. 3d. Hurst Nelson were 59s. 6d., Birmingham Wagons 27s. 9d., Central Wagons 88s. 9d., and North Central Wagons 12s. 6d.

Traffic Table of Overseas and Foreign Railways

	Railways	Miles open	Week ended	Traffics for week: Total this year	Traffics for week: Inc. or dec. compared with 1947/48	No. of week	Aggregate traffics to date: Total 1948/49	Aggregate traffics to date: Increase or decrease
South & Central America	Antofagasta... ...	811	19.2.50	£ 64,470	+ £ 1,590	7	£ 483,404	+ £ 15,400
	Costa Rica	281	Dec., 1949	c357,783	– c617,400	26	c5,155,862	– c917,757
	Dorada	70	Nov., 1949	23,909	– 8,758	48	320,787	+ 14,879
	Inter. Ctl. Amer. ...	794	Dec., 1949	$1,259,960	+ $91,260	52	$12,395,046	– $938 884
	La Guaira	22¾	Jan., 1950	$78,562	– $31,734	4	$78,562	– $31,734
	Nitrate	382	15.2.50	21,206	+ 4,370	6	67 493	+ 20 354
	Paraguay Cent. ...	274	17.2.50	₱139.917	+ ₱28,981	33	₱4,686,705	+ ₱1,216,039
	Peru Corp. ...	1,050	Jan., 1950	$6.454,700	+ $1,905,457	31	540,250 658	+ 513,154 984
	,, (Bolivian Section)	66	Jan., 1950	Bs.9,523,000	+ Bs.838,649	31	Bs.72,392,164	+ Bs.11,811,706
	Salvador	100	Oct., 1949	c68,000	– c14,000	17	c313,000	– c16,000
	Taltal	154	Jan., 1950	14,450	+ 4,535	31	90,155	+ 32,820
Canada	Canadian National†	23,473	Jan., 1950	11,680,000	– 756,000	4	11,680,000	– 756,000
	Canadian Pacific† ...	17,037	Dec., 1949	10,039,000	– 320,000	52	151,084,000	+ 2,667,000
Various	Barsi Light* ...	167	Jan., 1950	31,237	+ 2,647	44	298,770	+ 22,522
	Egyptian Delta ...	607	20.1.50	20,052	+ 1,776	42	552,314	– 44 667
	Gold Coast ...	536	Dec., 1949	286,620	+ 34,957	41	2,181,179	+ 280 809
	Mid. of W. Australia	277	Dec., 1949	35,317	+ 3,212	26	177,156	+ 1,307
	Nigeria	1,900	Nov., 1949	497,074	+ 25,415	35	3,864,775	+ 217,279
	South Africa ...	13,347	4.2.50	1,483,250	+ 76,681	44	65,420,568	+ 5,177,408
	Victoria	4,744	Oct., 1949	1,792,078	+ 371,156	17	—	—

* Receipts are calculated @ 1s. 6d. to the rupee

† Calculated at $3 to £1